University of Ladakh

SYLLABI AND COURSEES OF READING IN ECONOMICS CHOISED BASED CREDIT SYSTEM (CBCS) SYSTEM OUTLINE OF

(Session 2022-23, 2023-24)

OBJECTIVE OF THE COPURSE

- To encourage initiative, independent learning, awareness of analytical and theoretical approaches in the field of economics.
- To make exposure to recent research in economics and examine how this research is used into address today's policy development.
- To develop tools of analysis, theory and concepts for practical application to current economic and development issues in India.
- To study the courses that help you understand historical grounded schools of thought within economics.
- To experience an innovative pedagogy with problem-based learning, flipped classrooms and collaborative learning with the use of real economic data set.

CHOICE BASED CREDIT SYSTEM

The post graduate level course of the Department of Economics. It consists of 2-year course (under CBCS pattern) with semester system, 4 semesters, with two sessions in a year. Total marks of 2000 (100 per year and 500 per semester). The choice based credit system will be applicable to all the semesters.

Semester-I

Marks=500

Course Type	Course Title	Couse Code	Marks	Con. Hours	Total Credit	
Core	Microeconomics Theory	ECO-CR-101	100	60	4	
Core	Macroeconomics Theory	ECO-CR-102	100	60	4	
Core	International Trade	ECO-CR-103	100	60	4	
Core	Mathematical Economics	ECO-CR-104	100	60	4	
Core	Minor Research Project	ECO-RP-105	50	30	2	
DCE	Economics of Social Sector/MOOC	ECO-DCE-106	50	30	2	
DCE	Industrial Economics/MOOC	ECO-DCE-107	50	30	2	
DCE	Behavioural Economics/MOOC	ECO-DCE-108	50	30	2	
DCE	Indian Economic Thoughts/MOOC	ECO-DCE-109	50	30	2	
DCE	Indian Financial System/MOOC	ECO-DCE-110	50	30	2	
Note: Any one DCE/MOOC to be choose in this semester						
Total Credits= 20						

Semester-II

Marks=500

Course	Course Title	Couse Code	Marks	Con.	Total
Туре				Hours	Credit
Core	Advanced Microeconomics	ECO-CR-201	100	60	4
Core	Advanced Macroeconomics	ECO-CR-202	100	60	4
Core	Public Economics	ECO-CR-203	100	60	4
Core	Statistical Methods	ECO-CR-204	100	60	4
Core	Minor Research Project	ECO-RP-205	50	30	2
DCE	Agricultural Economics/MOOC	ECO-DCE-206	50	30	2
DCE	Monetary Economics /MOOC	ECO-DCE-207	50	30	2
DCE	Economics of Health and Wellbeing/MOOC	ECO-DCE-208	50	30	2
DCE	International Financial System/MOOC	ECO-DCE-409	50	30	2
DCE	Entrepreneurship /MOOC	ECO-DCE-210	50	30	2
Note: Any one DCE/MOOC to be choose in this semester					
Total Credits= 20					

Semester-III

Marks=500

Course Type	Course Title	Couse Code	Marks	Con. Hours	Total Credit	
Core	Economics of Development	ECO-CR-301	100	60	4	
Core	Indian Economy	ECO-CR-302	100	60	4	
Core	Research Methodology	ECO-CR-303	100	60	4	
Core	Economics of Population	ECO-CR-304	100	60	4	
Core	Minor Research Project	ECO-RP-305	50	30	2	
GE	Elementary Microeconomics/MOOC	ECO-GE-306	50	30	2	
GE	Introduction to Indian Economy/MOOC	ECO-GE-307	50	30	2	
Note: One Generic Elective (GE) to be opt from any other departments of Leh campus						
Total Credits= 20						

Semester-IV

Marks=500

Course	Course Title	Couse Code	Marks	Con.	Total
Туре				Hours	Credit

Core	Economics of Growth	ECO-CR-401	100	60	4	
Core	Contemporary Issues in Indian Economy	ECO-CR-402	100	60	4	
Core	Environmental Economics	ECO-CR-403	100	60	4	
Core	Dissertation	ECO-DR-404	100	60	8	
GE	Elementary Macroeconomics/MOOC	ECO-GE-405	50	30	2	
GE	Public Finance/MOOC	ECO-GE-406	50	30	2	
Note: One Generic Elective (GE) to be opt from any other departments of Leh campus						
Total Credits= 20						

<u>NOTE</u>

There will be internal examinations (Assignments, Tests and Presentations) of 30 percent marks in each semester. End-semester examination will be of the rest 70 percent marks in each semester. Pattern of end-semester question paper

(i) There will be two section A and B.

- (ii) There will be 9 questions in all.
- (iii) Section A will carry one compulsory question (Question no.1) with four sub-parts (consisting of short answer type question). Each sub-part (short answer type question) will be from each unit and a student will have to attempt all the four sub-parts.
- (iv) Section B will comprise of four long (Question no. 2 to 5); each question will have an option. Thus, there will two questions from each unit. In total, there will be eight questions in the section; two from each unit and a candidate will be asked to attempt four questions.
- (v) All the short answer type questions will carry 3¹/₂ marks each. Thus, question No. 1 will carry weightage of 14 marks. Whereas, each question from 2 to 5 will carry equal marks of 14 marks.

Project Report

Project/ Dissertation work will begin on third/forth semester. The weightage will be of 150 marks (6 Credits). At the end of semester, the students will submit project work in the form of a report. There will be a presentation before a panel of teachers from the department.

Microeconomics Theory (4 credits Course) Max. Marks: 100 Marks

Course code: ECO-CR-101 Contract Hours: 60 Hours

Course Objective: To provide students with a thorough knowledge and understanding of the foundations of modern economic analysis.

Unit 1: Consumer Choice

Budget constraint – properties of a budget set, changes in a budget line; Consumer Preferences – assumptions and examples; Well-Behaved Preferences; Marginal rate of substitution; Cardinal utility – constructing a utility function, Marginal Utility and MRS; Optimal Choice.

Unit II: Demand Analysis

Consumer demand and estimation of utility functions; Slutsky equation; Normal versus inferior goods; Types of demand functions; elasticity; welfare evaluation; Consumer surplus; Equivalent variation and compensating variation; Revealed preference (weak and strong axioms).

Unit III: Theory of Production and Costs

Production function; Returns to Factor and Scale; Cobb-Douglas and CES; Rate of technical substitution, technical progress; Short run and long run costs- Traditional and Modern Approach; Expansion path; Economies of scale.

Unit IV: Market Structure

Competitive Markets – demand and supply; demand and supply curves of individual firms; short-run versus long-run; competitive market equilibrium; Monopoly- market equilibrium; Price discrimination – first, second and third degree.

Instructions for paper setters and candidates

- Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

i.

Essential Reading List:

1. Varian H. R. (2010), Microeconomic Analysis -EWP and WW Norton and Co, Inc, New York.

2. Varian, H. R. (2010), Intermediate Microeconomics – A Modern Approach, EWP and WW Norton and Co, Inc, New York.

- 3. Whinston M. and Green (1995), Micro-economic Theory, Oxford University Press.
- 4. Pindyck R.S., D. Rubinfeld and P.L.Mehta (2012), Microeconomics, Pearson Education, S Asia.
- 5. Salvatore, D. (2003): Microeconomics: Theory and Applications, OUP, New Delhi.
- 6. Baumol, W.J. (1982), Economic Theory and Operational Analysis, Prentice Hall of India.
- 7. Sen, A. (1999): Microeconomics: Theory and Applications, OUP, ND.
- 8. Shepherd, R.W. (1970): Theory of Cost and Production Functions, Princeton Univ. Press, N.J.
- 9. Koutsoyiannis, A. (1980): Microeconomic Theory, MacMillan.

Further Reading

1. Arrow, K.J. and M.D. Intriligator (eds.) (1981): Handbook of Mathematical Economics, Vol.-I, North Holland, Amsterdam. 2. Barberà, S., P.J. Hammond and C. Seidl (eds.) (1998): Handbook of Utility Theory. Vol.1 Principles, Kluwer Academic Publishers, Dordrecht. 3. Blackorby, C and RR (1989): Will the Real Elasticity of Substitution Please Stand Up? (A Comparison of the Allen/Uzawa and Morishima Elasticities) The American Economic Review, Vol. 79, No. 4, pp.882-888.

4. Borch, K.H. (1968): The Economics of Uncertainty, Princeton Univ. Press, Princeton.

- 5. Deaton, A. and J. Muelbauer (1980): Economics and Consumer Behavior, CUP.
- 6. Debreu, G. (1959): Theory of Value, John Wiley, NY.
- 7. Diamond and Rothschild (eds.) (1978): Uncertainty in Economics, Academic Press, NY.
- 8. Ferguson, C.E. (1969): The Neo-Classical Theory of Production and Distribution, CUP, Chs. 1-6.
- 9. Gravelle, H. and R. Rees (1981): Microeconomics, Longman, London.
- 10. Green, H.A.J. (1976): Consumer Theory, MacMillan, London.
- 11. Johansen, L. (1972): Production Functions, North Holland, London.
- 12. Mishra, S.K. (2007): A Brief History of Production Functions.
- 13. Osborne, M. J. (2004): An Introduction to Game Theory, Oxford University Press, New Delhi.

SEMESTER I

Macroeconomics Theory (4 credits Course) Max. Marks: 100 Marks

Course code: ECO-CR-102 Contract Hours: 60 Hours

Objectives: To acquaint students to theories of macroeconomics and make them understand the importance of economic policies to check business cycles, inflation and employment.

Unit I: Sectoral Demand Functions

Consumption-Background and Cross section, Consumption Smoothing-Intertemporal constraints and preferences; Time preference and Permanent income; Role of Liquidity constraint and Duesenberry approach; Profit maximization and capital stock; adjustment costs and investment decisions; residential and inventory investment; irreversibility and investment.

Unit II: Demand for Money

Classical Approach to demand for money; Keynes liquidity preference approach; The regressive expectation model; The Portfolio Balance Approach; Money as a Consumer's and Producers Good; Velocity, money and inflation; Seigniorage – the optimal level of Seigniorage.

Unit III: Theorizing Business Cycle

Anatomy of cycle; Multiplier- Accelerator interaction; Business cycle theories-Keynes, Hicks, Samuelsson, Kaldor, Milton Friedman and Real Business theory.

Unit IV: Theory of Output Inflation and Unemployment

The demand and supply of labour; Keynesian unemployment and labour market; Involuntary and full employment; neoclassical labour market equilibrium; Friedman's Theory of natural rate of unemployment and output; Philips curve – Monetarist and Keynesian version.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

- 1. Andrew B. Abel, Ben S. Bernanke, Dean Croushore, Macro Economics Seventh Edition Pearson Publication.
- 2. Errol D'Souza. Macro Economics, Second Edition, Pearson Publication.
- 3. J. Bradford Delong, Macroeconomics, International Edition.
- 4. B. S. Gardner, Macroeconomics, Third Edition.
- 5. Froyen, R. T. (2013), Macro Economics: Theories and Policies, Pearson Education
- 6. Branson, W.H. (2005), Macro Economics Theory and Policy, Harper & Row, New York
- 7. Romer, D. L. (2011), Advanced Macro Economics, McGraw Hill Company Ltd. New York
- 8. Dornbusch, E. and S. Fischer (1981), Macro Economics, McGraw Hill International, Auckland

Further Reading List

1. Allen, R.G.D. (1968). Macroeconomic Theory: A Mathematical Approach, McGraw Hill, Tokyo. 2. Dernburg, Thomas F. and Duncan M. McDougall (1983). Macroeconomics: The Measurement, Analysis, and Control of Aggregate Economic Activity, McGraw-Hill International Book Company, New Delhi.

3. Friedman, M. (1957). The Theory of Consumption Function, Princeton University Press, Princeton. 4. Gupta, S.B. (1997). Monetary Economics, S. Chand and Company, New Delhi.

5. Johnson, D.W. (1976). Macroeconomics: Money, Prices and Income, John Wiley, Santa Barbara.

6. Kalecki (1969). Selected Essays on the Dynamics of the Capitalist Economy, Augustus M. Kelley, New York.

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

8. Rana, K.C. and K.N. Verma (1999). Macro Economic Analysis, Vishal Publications, Delhi.

9. Weintraub, S. (1972). Classical Keynesianism: Monetary Theory and the Price Level, Green Wood Press, Connecticut.

International Trade (4 credits Course) Max. Marks: 100 Marks

Course code: ECO-CR-103 Contract Hours: 60 Hours

Course Objective: To provide students with a comprehensive and clear exposition of the theory and principles of international trade that is essential for understanding and evaluation of important international economic issues.

Unit I: Pure Theories of International Trade

Classical theories of International trade – brief review; Theory of Reciprocal demand; Heckscher-Ohlin theory; Factor price equalization theorem; Empirical verifications of Heckscher-Ohlin theory— Leontief paradox; Factor intensity reversal.

Unit II: Alternative Theories of International Trade

International trade under imperfect competitions; Economies of scale and international trade; intra industry trade; Strategic trade theory; Technological gap model; Product cycle model.

Unit III: Theories of Protection and Economic Integration

Tariff— Meaning and types; partial and general equilibrium analysis of tariff; Optimum tariff; Effective rate of Protection; Stolper-Samuelson theorem; Regional economic integration— types; Theory of customs union—trade creation and trade diversion.

Unit IV: Growth Effects and Problems of Developing

Countries Effects of growth on trade; Rybczynski Theorem; Immiserizing growth; Trade problems of developing country; International cartels; Theory of Dumping; Prebisch-Singer Hypothesis.

Instructions for paper setters and candidates

- Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

i.

Essential Reading List:

- 1. Soderston B. and G Reed (1999), International Economics, McMillan Press Ltd., London.
- 2. Krugman P. R. and M. Obstfeild (2012), International Economics- Theory and Policy, Addison Wesley, New Delhi.
- 3. Salvatore D. (2011), International Economics, Wiley India, New Delhi.

4. Marrewijk C. V. (2007), International Economics: Theory, Application and Policy, Oxford University Press, New York.

- 5. Chacholieds M. (1999), International Economics, Macmillan Publication.
- 6. Kindleberger C.P. (1978), International Economics, R. D. Irwin Inc., Illinois.
- 7. Bhagwati, J. (Ed.) (1981). International Trade: Selected Readings, Cambridge University Press, Massachusetts.
- 8. Chacholiades, Miltiades (1990). The Pure Theory of International Trade, McGraw Hill, Kogakusha, Japan.
- 9. Cherunilam, Francis (2006), International Economics, Tata McGraw-Hill Publishing Co. Ltd., New Delhi.
- 10. Heller, H. Robert (1988). International Trade: Theory and Empirical Evidence, Prentice-Hall of India Pvt. Ltd., New Delhi
- 11. Kenen, Peter B. (1989). The International Economy, Prentice-Hall of India Pvt. Ltd., New Delhi.
- 12. Meade, James Edward (1952). A Geometry of International Trade, George Allen and Unwin Ltd., London.
- 13. Roy, P.N. (1986). International Trade: Theory and Practice, Wiley Eastern Ltd., New Delhi.
- 14. Sodersten, Bo (1991). International Economics, The Macmillan Press Ltd., London.

Further Reading List

1. Batra, Raveendra N. (1975). The Pure Theory of International Trade under Uncertainty, The Macmillan Press Ltd., London.

- 2. Carbough, R.J. (1999). International Economics, International Thompson Publishing, New York.
- 3. Cherunilam, Francis (1988). International Economics, Tata McGraw-Hill Publishing Co. Ltd., New Delhi.
- 4. Dana, M.S. (2000). International Economics: Study, Guide and Work Book, Routledge Publishers, London.
- 5. Dunn, R.M. and J.H.Mutti (2000). International Economics, Routledge Publishers, London.
- 6. Ellsworth, P.T. and J.C.Leith (1975). The International Economy, The Macmillan Company, New York.
- 7. Haberler, G. (1937). The Theory of International Trade, Macmillan & Co. Ltd., London.
- 8. Heller, H. Robert (1968). International Monetary Economics, Prentice-Hall of India Pvt. Ltd., New Delhi.
- 9. Johnson, H.G. (1967). International Trade and Economic Growth, Harvard University Press, Cambridge.
- 10. Kemp, K.C. (1964). The Pure Theory of International Trade, Prentice Hall, New Jersey.
- 11. Neihans, J. (1984). International Monetary Economics, John Hopkins University Press, Baltimore.
- 12. Salvatore, D. (1997). International Economics, Prentice Hall, New York.

SEMESTER- I Mathematics for Economics (4 credits Course) Max. Marks: 100 Marks

Course code: ECO-CR-104 Contract Hours: 60 Hours

Course Objective: To familiarise students with the basic mathematics required to understand the various dimensions of economics.

Unit I: Basic Concepts Set

Theory- Sets and set operations, Cartesian product of sets; Relations; Functions; one-to-one and onto functions— demand and supply functions; objective functions, Composite functions, Inverse functions and Binary operations; Logarithm and Exponents.

Unit II: Differentiation

Limit; Continuity and Differentiability of a function; Differentiation-Partial and Total differentials; Maxima and Minima; Derivatives of Implicit functions; Higher Order Differentiation; Euler's theorem; Uses of Differentiation in Economics; Applications of Differentiation; Constrained Optimization; Langragian Multiplier; Total revenue; total cost and product Curves.

Unit III: Integration

Integration- Concept and Fundamental Theorems; Indefinite and Definite Integrals; Economic Application of Integrals-Consumer's Surplus, Producer's Surplus, Investment and Capital formation.

Unit IV: Matrix Algebra

Matrices – Types and Operations; Determinants; Transpose; Ad-joint and Inverse of a matrix; Rank of a matrix; Cramer's rule; Matrix inversion method; Jacobian and Hessain Rule; Simultaneous Equations

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

- 1. Chiang A.C, (1984), Fundamental Methods of Mathematical Economics, Tata McGraw Hill.
- 2. Allen R. G. D, (2003), Mathematical Analysis for Economists, The Macmillan Press, New Delhi.
- 3. Henderson M. J., (2006), Microeconomics Theory, Tata McGraw-Hill, New Delhi.
- 4. Yamane T., (1995), Mathematics for Economists, Prentice Hall of India, New Delhi.

5. Gupta S. C. and V. K. Kapoor (2014), Fundamentals of Mathematical Statistics, Himalaya publishing House, New Delhi

Further Reading List

- 1. Budnick, F.S. (1997): Applied Mathematics for Business, Economics and Social Sciences, McGraw Hill.
- 2. Handry, A.T. (2016): Operation Research: An Introduction, Prentice Hall.
- 3. Nicholson, R.H. (1986): Mathematics for Business and Economics, McGraw Hill.
- 4. Sydsaeter, K., and P.J. Hammond (2012): Mathematics for Economic Analysis, Pearson.

Minor Research Project (2 credits Course) Max. Marks: 50 Marks

Course code: ECO-CR-105 Contract Hours: 30 Hours

 Minor Research Project Work shall be Discipline Centric to be carried out under the supervision of concerned teacher of the department. The project work shall be submitted in the form of a typed dissertation limited to a maximum of 25 pages soon after the completion the semester examination. The report will be evaluated by internally and followed by presentation of the work and viva voce. The project report will carry 50 marks (02 credits).

SEMESTER-I

Economics of Social Sector (2 credits Course)Course No: ECO-DCE-106Max. Marks: 50 MarksContract Hours: 30 Hours

Course Objective: The course is intended to acquaint students with an understanding of linkages between education health and economic development.

UNIT I: Introduction to Social Sector

Social sector— concept and its constituents; Social exclusion and inclusion; Social Development Index; Human Capital— the concept and components; Human capital versus physical capital; human capital and human development.

Unit II: Economics of Education and Health

Economics of Education; Education and economic development, Demand and supply considerations of education. Education planning and economic growth, Education Financing.

Economics of Health; Health dimensions of development; determinants of health status, Economics dimensions of financing Healthcare.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

- 1. Blaugh, Mark (1972), Introduction to Economics of Education, Penguin, London.
- 2. Folland, S. (2009), The Economics of Health and Health care, Pearson Prentice Hall, New Delhi
- 3. Parikh, K. S. (ed) various issues, India Development Report, Oxford University Press, New Delhi.
- 4. Kundu, A., (2006) India Social development Index, Oxford University Press, New Delhi.
- 5. Govinda R. (2002) India Education Report, Oxford University Press, New Delhi.
- 6. Mishra, R (2003), India Health Report, Oxford University Press, New Delhi.
- 7. Berman, P. (Ed.) (1995): Health Sector Reform in Developing Countries: Making Health Development Sustainable, Boston: Harvard series on population and International Health.
- 8. Cohen, E. and T. Gaske (1989): Economics of Education, Pergamon Press, London.
- 9. Henderson, J. W. (2007): Health Economics & Policy, (3e), Thomson South-Western, U.K.
- 10. Klarman, H.E. (1965): The Economics of Health, Columbia University Press, NY.

- 11. Mc Mohan, W.W. (1999): Education and Development: Measuring the Social Benefits, OUP, Oxford.
- 12. Psacharopoulos, G. (ed.) (1987): Economics of Education: Research and Studies, Pergamon Press, Oxford.
- 13. Tilak, J.B.G. (1994): Education for Development in Asia, Sage, ND.
- 14. Vaizoy (1962): Economics of Education, Faber and Faber, London.
- 15. Woodhall, M. (1992): Cost Benefit Analysis in Educational Planning, UNESCO, Paris.
- 11. World Bank (1993): The World Development Report, 1993: Investing in Health, OUP, NY.

Further Reading List

- 1. Baru, R.V. (1998): Private Health Care in India: Social Characteristics and Trends, Sage, ND
- 2. Becker, G.S. (1974): Human Capital (2e), National Bureau of Economic Research, NY.
- 3. Berman, P. and M.E. Khan (1993): Paying for India's Health Care, Sage, ND.

Industrial Economics (2 credits Course) Max. Marks: 50 Marks

Course code: ECO-DCE-107 Contract Hours: 30 Hours

Course Objective: To familiarize students with a broad range of the methods and models applied by economists in the analysis of firms and industries.

Unit I: Firm's Behaviour

Industrial Economics- Conceptual framework and scope; Organizational pattern of firms— Private sector, Public sector, and Joint sector; Objectives of a firm; Industrial efficiency—Concept, determinants and its measurement; Profitability— Concept and its measurement.

Unit II: Theories of Industrial Location and Growth

Downie's theory of growth of firm; Industrial location-- Determinants of Industrial location, Industrial location theories —Webers and Sergent Florence; Diversification - Meanings and objectives, Vertical Integration and Merger.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Barthwal R.R. (2010), Industrial Economics: An Introductory Textbook, (3rd ed.) New Age International. New Delhi

2. Ferguson P. R., & G. J. Ferguson (1994), Industrial Economics: Issues and perspectives, Palgrave Macmillan, N. York

3. Kuchhal, S.C. (1989), Industrial Economy of India, Chaitanya Publishing House, Allahabad

4. Hay D.D and D.I. Morries (1991), Industrial Economics Theory and Evidence, OUP.

5. Lee K. and E.I Nexon, (1984), Industrial Structure and policy in less development countries.

6. Ferguson P. R., H. Dodge, Anselm Haverkamp (1994), Industrial Economics: Issues and Perspectives, New York University Press.

7. Ahluwallia, I.J. (1992): Industrial Growth in India, OUP, Delhi.

- 8. Bain, J.E. (1959): Industrial Organization, Wiley and Sons, NY.
- 9. Barthwal, R.R. (2007): Industrial Economics: An Introduction Text Book (2e), New Age International, ND.
- 10. Dayananda, D. et al. (2002): Capital Budgeting- Financial Appraisal of Investment Projects, CU Press.

11. Divine, J. et al. (1976): An Introduction to Industrial Economics, George Allen and Unwin, London.

12. Mookherjee, D. (ed.) (1995): Indian Industry: Policy and Performance, OUP, Delhi.

Further Reading List

1. Clarkson, K.W. and R. Millar (1985): Industrial Organization: Theory, Evidence and Public Policy, McGraw-Hill, Tokyo.

- 2. Cyret, R.M. and J.G. March (1963): Behavioral Theory of the Firm, Engelwood Cliffs.
- 3. Ghosh, P.K. (1977): Government and Industry, OUP, Delhi.
- 4. Hennah, L. and J. Kay (1977): Concentration of Modern Industry, Macmillan, London.
- 5. Israd, W. (1956): Location and Space Economy, John Wiley, NY.
- 6. Shepherd, W.G. (1979): Economics of Industrial Organization, Prentice Hall.

Behavioural Economics (2 credits Course) Max. Marks: 50 Marks

Course code: ECO-DCE-108 Contract Hours: 30 Hours

Course Objectives: Identify and evaluate evidence for systematic departures of economic behaviors from the predictions of the neoclassical model, and psychological explanations for these anomalies. Explain how these models change the predictions for equilibrium behaviour and welfare analysis, and assess the implications for optimal policy.

Unit 1: Introduction: decision-making theories

Neo-classical economics – rationality assumption, optimization. Origin of Behavioral economics - Bounded Rationality, Rationality in Psychology and Economics by H. Simon. Duel System theory, Prospect theory.

Unit 2: Decision-making under risk and uncertainty

Heuristics and Biases programme- Representativeness, Availability, Anchoring and adjustment, mental accounting. Biases: Overconfidence, Confirmation bias, Framing, Status Quo Bias, Endowment Bias, Self-Control Bias. Fallacies: conjunction and disjunction fallacies, gambler's fallacies

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

- 1. Wilkinson and Klaes, An introduction to behavioural economics, Palgrave McMillan
- 2. Michelle Beddeley, Behavioural Economics and Finance, Rutledge, 2019
- 3. Paul De Grauwe and Yeumei Ji, Behavioural Macro Economics -Theory and Policy, Oxford University Press, 2019

Further Reading List

- 1. Alexander Rajko, Behaviour economics and business ethics- interrelation and application, Rutledge, London, 2012.
- 2. Steffan Heidel, Philosophical problems of behavioural economics by, Routlege, 1996.
- 3. Michael S Zoubulakis, Varieties of modern economic rationality from Adam Smith to Contemporary Behavioural and evolutionary economists, Routledge, 1997.
- 4. J.L. Buxter, Behavioural foundations of economics, McMillan Press.
- 5. Ruby E Vachinich and Nick Heather (Edited), Choice, Behavioural economics and addiction, Pergamon Elsevier, 2003.

Indian Economic Thought (2 credits Course) Max. Marks: 50 Marks

Course No: ECO-DCE-109 Contract Hours: 30 Hours

Course Objective: The Objectives of this course is to expose students to Indian Economic thoughts. Since ancient time India has produced economic thinkers, whose ideas have shaped destiny of this nation. Students shall enrich their understanding of the contemporary economic policies and practices better by familiarizing themselves with Works and economic ideas of these great thinkers from India.

Unit I: Ancient Economic Thought

Economic Ideas During Vedic Period; Manu's Varnashram Pratha, Kautilya's Arthashashtra

Unit II: Earlier and Gandhian Economic Thought

Dadabhai Naroji, Mahdev Govind Rande, Romesh Chandra Dutt. Gandhian economics thoughts; Swadeshi, Khadi & Cottage Industry, Antyodya.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Dutt, Romesh C. The Economic History of India under early British Rule, first published 1902, 2001 edition by Routledge.

2. Kumar, Dharma and Meghnad Desai, eds. The Cambridge Economic History of India: Volume 2, (1983).

3. Lal, Deepak. The Hindu Equilibrium: India C.1500 B.C.-2000 A.D. (2nd ed. 2005).

4. Raychaudhuri, Tapan and Irfan Habib, eds. The Cambridge Economic Hist/y of India: Volume 1, c. 1200-c. 1750 (1982).

5. Roy, Tirthankar. The Economic History of India 1857–1947 (2002, 2006, 2011).

6. Roy, Tirthankar. India in the World Economy from Antiquity to the Present (2012).

7. Roy, Tirthankar (2002), "Economic History and Modern India: Redefining the Link", The Journal of Economic Perspectives 16 (3): 109–130.

 Tomlinson, B. R. et al. The Economy of Modern India, 1860–1970 (1996) (The New Cambridge History of India)
Ratan Lal Basu and Raj Kumar Sen; 2008; ANCIENT INDIAN ECONOMIC THOUGHT Relevance for Today, Rawat publications

Indian Financial System (2 credits Course) Max. Marks: 50 Marks

Course No: ECO-DCE-110 Contract Hours: 30 Hours

Course Objective: To acquaint students with understanding of working and functioning of Financial System and the role of Indian Financial System in development of different sectors of the economy.

Unit I: Introduction

Indian Financial System—an overview; Macroeconomic dimensions of financial system; Major issues in Indian financial system; Financial Sector Reforms in India—an overview; Basel Reforms—implication for Indian Banking.

Unit II: Financial Markets and Stock Exchange

Structure, Functions and Organizations; Money Market – Features, Instruments and limitations; Capital Market –instruments and importance. Stock Exchange – Importance and methods of trading, National Stock Exchange, Bombay Stock Exchange; SEBI – Working and Functions.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3½ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

- 1. Khan, M. Y. (2015). Indian Financial System. Tata McGraw Hill, New Delhi.
- 2. Bhole, L. M. (2009). Financial Institutions and Markets. Tata McGraw Hill Comp New Delhi
- 3. Bhasin, N. (2009) Monetary Banking and Financial Developments in India, New Century Publications New Delhi
- 4. Gordon E. and K Natrajan, (2009) Financial Markets and institutions, Himalayan Publishing House, New Delhi
- 5. Machiraju, M. R. (1999) Indian Financial System, Vikass Publishing House, New Delhi.
- 6. Surry, M. M. (2004). Indian Economy in 21st Century, Tax Foundation of India, New Delhi.

7. ReddyY. V. (2001), Monetary and Financial Sector Reforms in India, UBS Publishers and Distributors Ltd., New Delhi.

SEMESTER – II

Advanced Microeconomics (4 credits Course) Max. Marks: 100 Marks

Course code: ECO-CR-201 Contract Hours: 60 Hours

Course Objective: To familiarize the student with complexities involved in consumer behaviour in a general equilibrium framework in order to develop an aptitude of critical thinking in economic matters of exchange, welfare and distribution among them.

Unit I: Oligopoly and Behavioural Economics

Theory of games; Mixed strategies; Nash equilibrium; sequential games; Oligopoly quantity leadership; price leadership; collusion and punishment strategies; Introduction to behavioural economics – framing; uncertainty; time; strategic interactions and social norms.

Unit II: Uncertainty and Information

Contingent consumption; utility functions and probabilities; Expected utility; Risk aversion; Risk spreading; Asymmetric Information- Market for lemons; Market signalling; Principle- agent problems; Moral Hazard

Unit III: Distribution

Neo-classical approach—Marginal productivity theory; Product exhaustion theorem; Elasticity of technical substitution and factor shares; Technical progress and income distribution; Pricing of fixed factors of production. Aggregative distributive dichotomy; justice as fairness – Rawls.

Unit IV: Theory of Exchange and Welfare

The Edgeworth box; trade, pareto efficient allocations and market trade; the algebra of equilibrium; Walras law; relative prices; efficiency and equilibrium; algebra of efficiency and the theorems of welfare economics; Aggregation of preferences; Social welfare functions; Welfare maximization; Arrow's impossibility theorem.

Instructions for paper setters and candidates

i. Examiner will set question paper in the given format-

- Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
- **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Varian H. R (2010), Microeconomic Analysis EWP and WW Norton and Co, Inc, New York

2. Varian H. R. (2010), Intermediate Microeconomics – A Modern Approach, EWP and WW Norton and Co, Inc, New York

- 3. Pindyck R.S., D. Rubinfeld and P.L.Mehta(2012), Microeconomics, Pearson Education, South Asia.
- 4. Salvatore D., (2010), Microeconomics; Theory and Applications, Oxford University Press, New Delhi.
- 5. Nicholson W. (1992), Microeconomic Theory: Basic Principals and Extensions, TheDriden Press, USA.
- 6. Baumol W.J. (1982), Economic Theory and Operational Analysis, Prentice Hall of India

Further Reading List

- 1. Coase, R.H. (1937): "The Nature of the Firm," Economica, Vol. 4, pp. 386-405.
- 2. Hahn, F. (1973): On the Notion of Equilibrium in Economics (Inaugural lecture, Cambridge University
- 3. Cyert, R.M. and R. March. (1963): A Behavioral Theory of the Firm, Prentice Hall, Englewood Cliffs
- 4. Graff, J. Dev. (1957): Theoretical Welfare Economics, CUP, NY.
- 5. Demsetz, H. (1995): The Economics of the Firm: Seven Critical Commentaries. CUP, Cambridge.

6. Foss, NJ and Klein, PG (2006): The Emergence of the Modern Theory of the Firm.

SEMESTER – II

Advanced Macroeconomic (4 credits Course) Max. Marks: 100 Marks

Course Code: ECO-CR-202 Contract Hours: 60 Hours

Course Objective: To develop critical thinking among students regarding contemporary macroeconomic debates.

Unit I: the IS-LM model: a general framework for Macroeconomic Analysis

Walrus law and the relevant Interest rate; the IS curve- shifts and slope; LM curve- Shift and slope; IS and LM- Fiscal and Monetary policy; Fiscal Policy and Crowding out; Fiscalist and Monetarist Intervention; Zero Interest rates and Macro policy; Ricardian Equivalence.

Unit II: Exchange rates and Macroeconomic policy in Open Economy

Exchange rates- Nominal and Real; Appreciation and Depreciation; Purchasing Power Parity; The IS-LM Model for Open economy- Mundell Fleming Model; Imperfect and perfect capital mobility; Fiscal and Monetary policies under fixed and flexible exchange rates.

Unit III: Macroeconomic Policy and Debates

Policy debates in Macroeconomics-Dynamic inconsistency- The rule vs. Discretion debate; case for central bank independence; Inflation targeting- concept and experience, Taylors rule; monetary policy in light of trilemma configuration; Holy Trinity; Macro level Impact of Financial Crises.

Unit IV: Recent Developments in Macro-economic

Theory Monetarism- Central propositions; New classical economics; Theory of Rational Expectations; Lucas imperfect information model; Supply side economics- Laffer curve and supply side, Success or failure; New Keynesian economics- central propositions; Sticky wages, Insider-outsider and efficiency wage models.

Instructions for paper setters and candidates

- Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

i.

Essential Reading List:

- 1. Andrew, B. Abel, Ben, S. Bernanke, Dean Croushore Macro Economics, Seventh Edition, Pearson Publication.
- 2. Errol D'Souza. Macro Economics, Second Edition, Pearson Publication.
- 3. J. Bradford Delong, Macroeconomics, International Edition.
- 4. B. S. Gardner, Macroeconomics, Third Edition.
- 5. Froyen, R. T. (2013), Macro Economics: Theories and Policies, Pearson Education
- 6. Branson, W.H. (2005), Macro Economics Theory and Policy, Harper & Row, New York
- 7. Romer, D. L. (2011), Advanced Macro Economics, McGraw Hill Company Ltd. New York
- 8. Dornbusch, E. and S. Fischer (1981), Macro Economics, McGraw Hill International, Auckland
- 9. Barro, R. (1997). Macroeconomics- A Modern Approach, 5e, MIT Press.
- 10. Blanchard, O.J. and S. Fischer (1996). Lectures on Macroeconomics, Prentice-Hall of India, New Delhi.
- 11. Heijdra, Ben J. and Frederick van der Ploeg. (2004). Foundations of Modern Macroeconomics, OUP, NY.
- 12. Mankiw, N.G. (2007). Principles of Macroeconomics, Thomson-South Western, Singapore.

Further Reading List

1. Allen, R.G.D. (1968). Macroeconomic Theory: A Mathematical Approach, Macmillan, London.

2. Ball, R.J. and P. Doyle (1972). Inflation: Selected Readings, Penguin, Harmondsworth, England.

3. Baumol, W.J. (1970). Economic Dynamics, Macmillan, New York.

4. Culbertson, J.M. (1971). Macroeconomic Theory and Stabilization Policy, McGraw Hill, London. 5. Friedman, M.

(Ed) (1956). Studies in Quantity Theory of Money, The Univ. of Chicago Press, Chicago.

6. Frisch, H. (1983). Theories of Inflation, Cambridge University Press, Cambridge.

7. Gupta, S.B. (1997). Monetary Economics, S. Chand and Company, New Delhi.

8. Makinon, G. E. (1980). Money, the Price Level and Interest Rates, Prentice Hall, New Delhi.

9. Rana, K.C. and K.N. Verma (1998). Macroeconomic Analysis, Vishal Publications, Jalandhar.

10. Samuelson, P.A. (1966). The Collected Scientific Papers of Paul A. Samuelson, Oxford and IBH Publishing Company, New Delhi.

Public Economics (4 credits Course) Max. Marks: 100 Marks

Course No: ECO-CR-203 Contract Hours: 60 Hours

Course Objectives: To familiarize students with conceptual and theoretical framework of public economics and to acquaint them with basic and advanced framework of public policies.

Unit I: Fundamentals of Public Economics

Public Economics: conceptual framework; scope and schools of thought; Tools of Budget Analysis; Role of government– allocation, distribution and stabilization; Externality theory; Internalising an externality; Coase theorem.

Unit II: Public Goods

Optimal provision of Private and Public goods; Free Riders Problem; Cost Benefit analysis; Problems of allocating resources-preference revelation and aggregation; Political Economy- Lindahl Pricing; Mechanisms for aggregating Individual preferences: Arrow's Impossibility Theorem; Politico-eco-bureaucracy; Optimal Fiscal federalism and Tibeout model.

Unit III: Public Expenditure and Taxation

Public expenditure–Wagner's and Wiseman-Peacock hypothesis; Pure theory of public expenditure; Reforms in public expenditure- programme budgeting and zero-base budgeting; Taxation and types; measuring fairness of tax systems; Tax Incidence; Taxation and economic efficiency; Dead-weight loss; Theory of Optimal Taxation.

Unit IV: Fiscal Federalism in India

Concept and evolution of Fiscal Federalism; Centre-State financial relations; Sources of Revenue; Trends in Resource Transfer from Centre to State; Principles of Multi Unit Finance; Budget Deficit and Its Implications; New tax regime – GST.

Instructions for paper setters and candidates

- Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

i.

Essential Reading List:

- 1. J. Gruber, (2016), Public Finance and Public Policy, MIT.
- 2. H. Rosen (2013), Public Finance. MIT Press.
- 3. J. E. Stiglitz (2015),: Economics of Public Sector, Norton, New York.
- 4. Jha, R. (1998), Modern Public Economics, Routledge London.
- 5. Musgrave and Musgrave (2005), Public Finance in Theory and Practice, Tata McGraw Hill, New Delhi.
- 6. A. B. Atkinson and J. E. Stiglitz, (1980); Lectures on Public Economics. Tata McGraw Hill, New York.
- 7. J. Cullis and P. Jones (1998), Public Finance and Public Choice, Oxford University Press.
- 8. R. A. Musgrave (1959), The Theory of Public Finance. McGraw Hill, Tokyo
- 9. Buiter, W.H. (1990): Principles of Budget and Fiscal Policy, MIT Press.
- 10. David, N. and Nicholas, S. (eds.) (1987): The Theory of Taxation for Developing Countries, OUP.
- 11. Hyman, D.N. (2007): Public Finance: A Contemporary Application of Theory to Policy, Thomson Asia Pvt. Ltd., Singapore.
- 12. Mishra, B. (2006): Economics of Taxation: Theory and Application, Akansha Publishing House, ND.

- 13. Prest, A.R. (1975): Public Finance in Theory and Practice, Weidenfeld and Nicholson, London.
- 14. Ursula, H. (1968): Public Finance, James Nisbet and Co., London.

Further Reading List

- 1. Davie, B.F. and B.F. Duncombe (1970): Public Finance, Holt. Rineha and Winstreet, NY.
- 2. Duff, L. (1997): Government and Market, Orient Longman, New Delhi.

3. Flatters, F., V. Henderson and P. Mieskowski (1974): Public Goods Efficiency and Fiscal Equalization, Journal of Public Economics, Vol.3, pp.99-112.

- 4. Friedman, A. (1986): Welfare Economics and Social Choice Theory, Martins Nijhoff, Boston.
- 5. Hughton, R.C. (ed.) (1975): Public Finance, Penguin Publication.
- 6. Mishan, E.J. (1987): Cost-Benefit Analysis: An Informal Introduction, George Allen and Unwin, London.
- 7. Mishra, B. (2006): Fiscal Policy in North-East India, Akansha Publishing House, ND.
- 8. Spulber, N. (1998: Reading the State, Cambridge: Cambridge University Press.
- 9. Srivastav, D.K. (Ed.) (2000): Fiscal Federalism in India, Har-Anand Publications Ltd., ND.
- 10. Stiglitz, J.E. (1986): Economic of Public Sector, Norton, NY.
- 11. Ulbrich, H. (2004): Public Finance in Theory and Practice, Thomson Asia Pvt. Ltd., Singapore.

Statistical Methods (4 credits Course) Max. Marks: 100 Marks

Course code: ECO-CR-204 Contract Hours: 60 Hours

Course Objective: To enable students to understand basic as well as advanced concepts of statistics and its applications in economics.

Unit I: Probability and Distribution

Meaning and definition of Probability; Probability Rules; Addition Rule; Multiplication Rule; Bay's theorem; Conditional probability; Concept of a random variable- Discrete and continuous; Expected values of a random variable; Variance of a random variable; Discrete random variables- Bernoulli; Binomial; Poisson, Continuous random variables- The normal distribution, Chi-square distribution.

Unit II: Theory of Sampling

Data collection-Primary and Secondary sources; Methods of collecting primary data; Sampling -Types; Small and large samples - Properties and Comparison, Sampling distribution; Central limit theorem; Designing a Household Sample survey.

Unit III: Hypothesis Testing

Testing of hypothesis- Level of significance and Level of confidence, Confidence limits and Critical Region; Tests of significance- Type I and II errors; Goodness of fit; One tailed and two tailed tests; Hypothesis testing based on Z test, t tests, Chi-square and F tests.

Unit IV: Correlation Regression and Economic Forecasting

Correlation—meaning and scope; Karl Pearson's Coefficient of Correlation; rank Correlation; Partial and Multiple Correlation; Regression-Meaning and Scope; Simple and Multiple Regression; Forecasting; Nature and decomposition of a time series.

Instructions for paper setters and candidates

i. Examiner will set question paper in the given format-

- Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
- **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Barrow M. (2006), Statistics for Economics, Accounting and Business Studies, Prentice Hall.

- 2. Gupta S. C. (2011), Fundamentals of Statistics, Himalayan Publishing House, New Delhi.
- 3. Gupta S. P. (2012), Statistical Methods, Himalayan Publishing House, New Delhi.
- 4. Floyd J. E. (2010), Statistics for Economists: A Beginning

5. HoggR.V. and A.T. Craig Hogg, (1970), Introduction to Mathematical Statistics, Macmillan Publishing Co., New York.

6. Rice J. A. (1995), Mathematical Statistics and Data Analysis, Duxbury Press.

7. Hogg R.V. and E.A. Tanis, (1993), Probability and Statistical Inference, Macmillan Publishing Company, New York.

8. Clarke G. M. and D. Cooke, (1992), A Basic Course in Statistics, Arnold Publishing House.

9. Rao, C.R. (2008): Linear Statistical Inference and Applications, Wiley and Sons.

10. Sulivan, M. (2012): Fundamentals of Statistics, Pearson.

Further Reading List

1. Chou, Y.L. (1989): Statistical Analysis for Business and Economics, Elsevier Publishing Company.

2. Feller, W. (1968): An Introduction to Probability Theory and Its Applications, Vol. I (3e), Wiley.

- 3. Johnson, R.A. and D.W. Wichern (1996): Applied Multivariate Statistical Analysis, Prentice Hall, ND.
- 4. Gujarati, D.N., D.C. Porter and S. Gunasekar (2012): Basic Econometrics, Tata McGraw Hill.

5. Hooda, R. (2013): Statistics for Business and Economics, Vikas Publishing House.

SEMESTER-II

Minor Research Project (2 credits Course) Max. Marks: 50 Marks

Course code: ECO-CR-205 Contract Hours: 30 Hours

 Minor Research Project Work shall be Discipline Centric to be carried out under the supervision of concerned teacher of the department. The project work shall be submitted in the form of a typed dissertation limited to a maximum of 25 pages soon after the completion the semester examination. The report will be evaluated by internally and followed by presentation of the work and viva voce. The project report will carry 50 marks (02 credits).

Agriculture Economics (2 credits Course) Max. Marks: 50 Marks

Course code: ECO-DCE-206 Contract Hours: 30 Hours

Course Objectives: The objective of this course is to provide a detailed treatment of issues in agriculture economics to those intending to specialize in this area.

Unit I: Introduction

Nature and scope of agricultural economics; Role of agriculture in economic development; interdependence between agriculture and industry; Models of interaction - Lewis &Ranis-Fei Models; Theories of agricultural development –Shultz, Mellor's and Boserup.

Unit II: Agriculture Production and Productivity

Agricultural production- Resource and efficiency in traditional agriculture; Principles of Resource allocation& Conditions of equilibrium: factor-factor relationship; factor-product relationship, product-product relationship; Production function analysis in agriculture - Cobb-Douglas, Spillman and Quadratic Production Function; Limitations of the production function approach; Farm budgeting- Partial Budgeting and Total Budgeting.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Lekhi, R.K., Singh, J. (2016), Agricultural economics; An Indian Perspective., Kalyani Publishers, New Delhi.

- 2. J.W Mellor (1969), The Economics of Agricultural Development, Cornell University Press.
- 3. K. Subbarao (1989), Agricultural Marketing and Credit, ICSSR.
- 4. E.O Heady (1961), Economics of Agricultural Production and Resource use, Prentice Hall, New York.

5. Reddy S. S., Ram P. R, SastryN. and Devi B. (2006), Agricultural Economics, Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi.

- 6. Bhaduri, A. (1984), The Economic Structure of Backward Agriculture, Macmillan, Delhi.
- 7. Bilgrami, S.A.R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.
- 8. Dantwala, M.L. et, al. (1991), Indian Agricultural Development Science Independence, Oxford & IBH, New Delhi.

9. Government of India (1976), Report of the National Commission on Agriculture, New Delhi. 5. Government of India, Economic Survey (Annual), New Delhi.

Further Reading List:

- 1. Gulati, A., and T. Kelly (1999) Trade Liberalisation and Indian Agriculture, Oxford University Press, New Delhi.
- 2. Joshi, P.C. (1975), Land Reforms in India: Trends and prospects, Allied Publishers, Bombay.
- 3. Kahlon, A.S. and Tyagi D.S. (1983), Agriculture Price Policy in India, Allied Publishers, New Delhi:
- 4. Rao, C.H. Hanumantha (1975), Agricultural Growth, Rural Poverty and Environmental Degradation in India, Oxford University Press, New Delhi.
- 5. Reserve Bank of India, Report on Currency and Finance (Annual), Mumbai.
- 6. Rudra, A, (1982), Indian Agricultural Economics: Myths and reality, Allied Publishers. New Delhi.
- 7. Stini, G.R. (1979), Farm Size. Resource Use Efficiency and Income Distribution, Allied Publishers, New Delhi.
- 8. Papola, T.S. (1982), Rural Industrialization in India, Himalaya Publishing House, Bombay.
- 9. Soni, R.N. (1995), Leading Issues in Agricultural Economics, Arihant Press, Jalandhar

Monetary Economics (2 credits Course) Max. Marks: 50 Marks

Course code: ECO-DCE-207 Contract Hours: 30 Hours

Course Objective: To familiarise students with the basic concepts, theories and approaches; to enable them to understand monetary policy framework and the challenges confronting the apex monetary authorities so that they are able make a critical analysis of current monetary policy of RBI.

Unit I: Demand for Money

Introduction- Deriving the Demand for Money; Demand for money— Classical and Keynes Theories; Neoclassical theory of money; Money, bonds and other Assets.

Unit II: Supply of Money

Money supply- the instruments of money supply; the determinants of money supply; The H theory of money supply; Money multiplier process; Determinants of money multiplier; Reserve bank's analysis of money.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Lloyd (1979), Money Banking and Economic Activity, Addison Wesley.

- 2. Miskin F. (2015), The Economics of Money: Banking and Financial Markets, Addison Wesley Long mate.
- 3. Bhole, L. M. (2009). Financial Institutions and Markets, Tata McGraw Hill Comp New Delhi.
- 4. Gupta, S. B (2010), Monetary Economics. S. Chand and Com. Ltd. New Delhi.
- 5. Hubbard, G. R. (1997), Money, the Financial System and Economy. Addison Wesley.

6. Burton, M. and B. Brown (2009), the Financial System and the Economy Principles of Money and Banking, Prentice Hall of India, New Delhi

Further Reading List;

- 1. Bofinger, P. (2001). Monetary Policy: Goals, Institutions, Strategy and Instruments. OUP
- 2. Dennis Geoggrey, E.J. (1981). Monetary Economics. Longman.
- 3. Desai, V. (2019). The Indian Financial System and development. Himalaya Publishing House.
- 4. Diulio, A. E. (1987). Theory and Problems of Money and Banking. International Edition (Schaum's Outline Series).

5. Fabozzi, F. J. & Franco (2009). Capital Markets Institutions and Instruments, (4th ed.). New Jersey: Prentice Hall, Modigliani.

6. Gordon, E. & Natarajan, K. (2019), Financial Markets & Services. Himalaya Publishing House.

7. Howells, P. & Bain, K. (2002). The Economics of Money, Banking and Finance. Prentice Hall, Pearson Education Ltd.

8. Khan, M.Y. (2017). Indian Financial System. Tata Mcgraw Hill.

9. Kulkarni, G. (1999). Modern Monetary Theory. New Delhi: Macmillan.

10. Mankiw, N.G. (2008). Macro-economics. New York: Macmillan Worth Publishers.

11. Mohan, R. (2009). Monetary Policy in a Globalized Economy - A Practitioner's View. Oxford University Press.

SEMESTER- II

Max. Marks: 50 Marks

Course Objectives: The main objective of this course to acknowledge about key economic concepts and analytical tools needed to analyze human economic behavior in general.

Understand and apply microeconomic principles to analyze the major issues of the health care sector. And also, to understand the key institutional and market factors that affect the incentives of the stakeholders in the key health care markets.

Unit-I: Introduction to Health Economics

Meaning and Scope of Health Economics: Interdependency between Health and Development: Dual relationship between Health and Economic Status; Dimensions of Health- morbidity- Mortality and Life Expectancy; Occupational Health Hazards: Determinants of Health- Nutrition and Health- Malnutrition.

Unit-II: Health Insurance and Uncertainty

Comparing Insurance Contracts. The role of asymmetric information. Adverse Selection: Akerlof's Market for Lemons, Rothschild-Stiglitz Model. Moral Hazard and its magnitude. Limiting moral hazard: co-insurance and co-payment, deductibles, monitoring and gate keeping.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Bhattacharya J, Hyde T and Tu P (2014) Health Economics, New York, Palgrave Macmillan.

Folland S, Goodman AC and Stano M (2013) The Economics of Health and Health Care New Jersey USA, Pearson.
Jack, W (1999) Principles of Health Economics for Developing Countries. Washington DC, WBI Development Studies, World Bank.

4. McGuire A, Henderson J and Mooney G (1988) The Economics of Health Care. An Introductory Text. London, Routledge.

Further reading List:

- 1. Donaldson, C. and Gerard, K., Economics of Health Care Financing, Macmillan Press
- 2. Phillips, C., Health Economics: An Introduction for Health Professionals, Blackwell Publishers.

SEMESTER-II

International Finance (2 credits Course) Max. Marks: 50 Marks

Course No: ECO-DCE-209 Contract Hours: 30 Hours

Course Objectives: To provide the conceptual and analytical framework for thinking about contemporary issues in international finance.

Unit I: Foreign Exchange Markets Structure and functions of foreign exchange markets; Exchange rate determination; Foreign exchange transactions; Forward exchange market; Hedging, speculation and

arbitrage; Theories of Exchange rate determination – Purchasing power parity theory; Asset market approach.

Unit II: International Monetary System

Exchange rate regime and the policy trilemma; gold Standard, World wars and recession; Evolution, operation and collapse of Bretton Woods's system; Floating rates; International Monetary Fund (IMF); World Bank.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3½ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Soderston, B. and G Reed (1999), International Economics, McMillan Press Ltd., London.

2. Krugman, P. R. and M. Obstfeild (2012), International Economics- Theory and Policy, Addison Wesley, New Delhi.

3. Salvatore, D. (2011), International Economics, Wiley India, New Delhi.

4. Carbaugh, R. J, (2008) International Economics, Cengage Learning, New Delhi

5. Marrewijk, C. V. (2007); International Economics: Theory, Application and Policy, Oxford University Press, New York.

6. Chacholieds, M. (1999), International Economics, Macmillan Publication.

7. Kindleberger, C.P. (1978), International Economics, R. D. Irwin Inc., Illinois.

SEMESTER - II

Entrepreneurship (2 credits Course) Max. Marks: 50 Marks

Course code: ECO-DCE-210 Contract Hours: 30 Hours

Unit I: The Foundations of Entrepreneurship

Entrepreneurship - Introduction to entrepreneurship, benefits and drawbacks of entrepreneurship, drivers of entrepreneurship, cultural diversity of entrepreneurship; Managing the pitfalls of entrepreneurship, models of entrepreneurship; Creativity - Creative thinking, barriers to creativity, creativity and innovation, process of innovation; Corporate entrepreneurship - Concept and approaches; Role of small business in economic development; Entrepreneurial environment.

Unit II: Entrepreneurship Development Programmes (EDPS)

Objectives, relevance and phases of EDPs; Misconceptions about EDPs; Factors affecting success of EDPs; Role of EDP: Stimulatory role, supportive role, sustaining role & socio-economic role; Operational difficulties of EDPs; Entrepreneurial training; Models for entrepreneurial development programmes; Institutional arrangements for development of new ventures: NIESBUD, EDI, TCOs, MSME; Schemes for women entrepreneurship; Rural entrepreneurship - Concept, constraints and schemes for rural entrepreneurship.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Thomas W. Zimmerer, Norman N. Scarborough and Doug Wilson. Essentials of Entrepreneurship and Small Business Management, PHI Learning Pvt. Ltd., New Delhi.

2. David H. Holt. Entrepreneurship New Venture Creation (1st ed.). PHI Learning Pvt. Ltd., New Delhi.

3. Jeffrey A. Timmons and Stephen Spinelli. New Venture Creation: Entrepreneurship for the 21st Century McGraw-Hill/Irwin.

4. Michael Schaper and Thierry Volery, John Wiley and Sons. Entrepreneurship and Small Business. Australia Ltd.

- 5. Desai, V., Small Scale Industries and Entrepreneurship, Himalaya Publishing House.
- 6. Deshpande, M. V., Entrepreneurship of Small Industries, Deep and Deep Publications, N Delhi.

7. Holt, D.H., Entrepreneurship - New Venture Creation, Prentice Hall.

Further Reading List:

1. Kaulgud, A., Entrepreneurship Management, Vikas Publishing House, New Delhi.

- 2. Otes, D., A Guide to Entrepreneurship, Jaico Books Publishing House, New Delhi.
- 3. Theduri, B., Entrepreneurship Development: An Analytical Study, Akansha Publishing House, New Delhi

Economics of Development (4 credits Course) Max. Marks: 100 Marks

Course No: ECO-CR-301 Contract Hours: 60 Hours

Course Objectives: To enable students to think how transition occurs in an economy from the path of grind to prosperity and make them aware about changing contours of development.

Unit I: Poverty, Inequality and Development

Concept and measures of Poverty; Chennery-Ahluwalia welfare index; Construction of poverty weighted index of social welfare; Measurement of income inequality-Lorenz curve; properties of a desirable inequality measure; Goulet's and A.K. Sen's concept of development-Capabilities approach; Concept and assessment of Development Gap.

Unit II: Theories of Development

Myrdal's theory of circular and cumulative causation; The New Economic geography-Krugman's theory; Jorgenson's model of Dual economy; Organizational dualism and economic development (Hla Myint)-Stylized framework of a developed organized and underdeveloped organized economy; Kremer's O-ring theory of economic development. Unit

III: Sectoral Aspects of Development Importance of industry and agriculture in economic developmentthe model of complementarities between agriculture and industry; Structure of labour market in developing economies; Theory of Rural-Urban migration and Harris-Todaro Model; Choice of techniques and appropriate technology; Choice of techniques and conflict in objectives.

Unit IV: Role of institutions and Resource allocation

Role of market and market failure; Role of state and state failure; Role of community and community failure; Project appraisal- cost-benefit analysis; Technique of shadow pricing-Little-Mirrlees approach and UNIDO Approach.

Instructions for paper setters and candidates

i. Examiner will set question paper in the given format-

- Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
- **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

- 1. Thirlwall, A. P. (2014), Growth and development, Palgrave MacMillan, U.K
- 2. Todaro, M.P. and Smith (2013), Economic development, Pearson Education, Delhi
- 3. Meir, G. M. and J.E. Rauch (1997). Leading issues in Economic development, OUP, N York
- 4. Sharp, A.M., C.A. Register and R.H. Leftwich (1988), Economics of social issues, Universal Bookstall, New Delhi.

5. Gills, M. Perkins, Romer and Snodgrass (1989), Economics of development, W. W. Norton and Company, New York.

- 6. Ray, D. (2010), Development Economics, Oxford University Press, New Delhi
- 7. Hayami, Y. Development economics, (2001) Oxford University Press, New Delhi

Further Reading List

- 1. Bardhan, P. and C. Udry (1999): Development Microeconomics, OUP, NY.
- 2. Barro, R. and X. Sala-i-Martin (1995): Economic Growth, McGraw Hill, NY (reprinted MIT Press 2001).
- 3. Basu, K. (1984): The Less Developed Economy, Basil Blackwell, England.

4. Djankov, S., E. Glaeser, R. La Porta, A. Shleifer, and F. Lopez-de-Silanes (2003): "The New Comparative Economics", Journal of Comparative Economics, December.

5. Forbes, K.J. (2000): "A reassessment of the relationship between inequality and growth," American Economic Review, Vol.90, No.4, pp.869-887.

6. Sen, A.K. (1981): Poverty and Famines: An Essay on Entitlement and Deprivation, Clarendon Press. 12. United Nations (2003): Human Development Report, United Nations, NY.

Indian Economy (4 credits Course) Max. Marks: 100 Marks

Course No: ECO-CR-302 Contract Hours: 60 Hours

Course Objectives: To sharpen the analytical faculty of the students, by highlighting an integrated approach to the functioning aspects of the Indian economy, keeping in view the scope for alternative approaches.

Unit 1: Economic Development since Independence

Major features of the economy at independence; growth and development under different policy regimes—goals, constraints, institutions and policy framework; an assessment of performance—sustainability and regional contrasts; structural change, savings and investment.

Unit II: Population and Human Development

Demographic trends and issues; Migration and Urbanization – concept, extent and issues; education- status and policy interventions; health and malnutrition – extent, issues and policy response.

Unit III: Growth and Distribution

Concept of Poverty – absolute and relative – temporary and chronic – measures of poverty – functional impact of poverty; Trends and policies in poverty; inequality and unemployment – extent, incidence and trends; Public policies of employment generation.

Unit IV: Growth dynamics and Macroeconomic Policies

Changing contours of state & market in Indian economic growth; distribution and structural change – Comparative historical perspective; Trade and investment policy; fiscal and monetary policies; new tax regime - GST.

Instructions for paper setters and candidates

- Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3½ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

i.

Essential Reading List:

1. Nayak, P. (2015), Economic Development of India (Critical Concepts in Economics), London & New York, Routledge, 2015

- 2. Drèze J. and Amartya Sen (2013), An Uncertain Glory India and Its Contradictions. Princeton University Press
- 3. Panagariya, A. (2008), India the Emerging Giant, Oxford University Press, 2008
- 4. Krueger A. (2003), Economic Policy Reforms and the Indian Economy, Oxford University Press.

5. Bhagwati Jagdish and Arvind Panagariya (2013): Why Growth Matters: How Economic Growth in India Reduced Poverty and the Lessons for Other Developing Countries, Public Affairs.

- 6. Byres, T.J. (1998) (Ed.): The Indian Economy: Major Debates since Independence, OUP, Delhi
- 7. Bardhan, P.K. (1999): Political Economy of Development in India, OUP, ND.
- 8. Chakravarty, S. (1987): Development Planning: The Indian Experience, OUP, ND.
- 9. Dantwala, M.L. (1996): Dilemmas of Growth: The Indian Experience, Sage, ND.
- 10. Kapila, Uma (2015): Indian Economy: Performance and Policies: 2015 16, Academic Foundation.
- 11. Kapila, Uma (Ed) (2014): Indian Economy since Independence, 25th edition, Academic Foundation, Delhi.

12. Nagaraj R (Ed) (2012): Growth, Inequality and Social Development in India: Is Inclusive Growth Possible?, London, Palgrave Macmillan

- 13. Ray Partha (2013): Monetary Policy, Oxford India Short Introductions, OUP, New Delhi
- 14. Srivastava, D.K. (2005): Issues in Indian Public Finance New Century Publications, Delhi

15. Tendulkar, S.D and T.A. Bhavani (2007): Understanding Reforms- Post 1991 India, OUP.

Further Reading List

- 1. Ahluwalia, I.J and I.M.D. Little (Eds.) (1998): India's Economic Reforms and Development, OUP,
- 2. Bardhan, Pranab (1998): The Political Economy of Development in India, (2nd edition), OUP, Delhi.
- 3. Basu, K. (2007): The Oxford Companion to Economics in India, OUP.
- 4. Economic Survey (latest Issue), Ministry of Finance, Government of India
- 5. Joshi, V. and I.M.D. Little (1999): India: Macro Economics and Political Economy, 1964-1991, OUP, ND.
- 6. Latest Finance Commission Report, Government of India.

Research Methodology (4 credits Course) Max. Marks: 100 Marks

Course No: ECO-CR-303 Contract Hours: 60 Hours

Course Objective: The objective of the course is to acquaint the students with the basics of research methods used in economics research. And, the objective is also to make them learn about the use of computer in research.

Unit-1 Research Methodology

Meaning and Types of Research, Scope of Research in Economics, Significance/Utility of Research in Economics, Qualities of a researcher, Research Process-Literature review: traditional, thematic and metaanalysis methods, identification and selection of research problem, Hypothesis, Research Design. Formulation

Unit-2 Sources Data

Primary and Secondary, Methods of Primary Data Collection, Secondary Data Sources – India and abroad, Tools of primary data collection. Classification, Tabulation, Presentation, Analysis-Descriptive and Inferential

Unit-3 Data Analysis

Qualitative, Quantitative and Mixed Methods of Data Analysis and Interpretation of Results; Report Writing: Types of reports, Steps in report writing, Citation Styles, Bibliography and Appendix

Unit-4 Use of Computer in Research

Use of MS word, Excel, power point, Research Ethics and dealing with plagiarism/similarity in research report writing.

Instructions for paper setters and candidates

- Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

i.

Essential Reading List:

- 1. Bruce, B. and Howard, L. (2014). Qualitative Research Methods for the social sciences, London: Pearson.
- 2. Flick, U. (2014). An introduction to qualitative research. Sage Publications.
- 3. Flick, U. (2015). Introducing research methodology: A beginner's guide to doing a research project. Sage.
- 4. Gregory, I. (2005). Ethics in research. London: Continuum.

5. Gupta, S.L. and Gupta, H. (2011). Research Methodology: Texts and Cases with SPSS. Delhi: International Book House.

- 6. Guthrie, G. (2010). Basic research methods: An entry to social science research. SAGE Publications India.
- 7. Kothari, C.R. and Garg, G. (2014). Research Methodology: Methods and Techniques, New Age.
- 8. Schwartz, S. (2012). Microsoft Office 2010, New Delhi: Pearson.

Economics of Population (4 credits Course) Max. Marks: 100 Marks

Course No: ECO-DCE-304 Contract Hours: 60 Hours

Course Objectives: To make students aware of importance of population in economic development in light with the established theories on the subject.

Unit I: Meaning Scope and Sources of Data

Meaning scope and subject matter of demography; Sources of demographic data—Census, vital registration, sample surveys; Theories of population growth—Malthusian; Demographic transition, Optimum Theory; Population projections; Stable and stationary populations.

Unit II: Population Growth and Structures

Population growth since 20th Century—levels and trends; Population and economic development; Population and environment; Age structure—measures, patterns, implications; Age pyramid; Population aging; Sex ratio—measures, patterns, determinants.

Unit III: Components of Population Growth

Fertility—basic measures—TFR, GRR, NRR; Levels, trends and determinants; Mortality—basis measures—IMR, MMR—levels, trends and determinants; Life Tables—construction and Uses; Migration—measures, types, causes and consequences.

Unit IV: Population of India and Ladakh

Growth and distribution of population in India; Fertility in India, levels and trends; Mortality in India, levels and trends; IMR and MMR in India; Characteristics of population in India—age structure and sex structure; PNDT Act; Population policies in India. Demographic profile of Ladakh; growth rate, sex ratio, urbanization, age composition and workforce participation rate & occupation.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3½ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

- 1. H. Shyryock and J.S, Siegel; The Methods and Materials of Demography.
- 2. K.B.Pathak and F.Ram; Techniques of Demographic Analysis, Himalyan Publishing House.
- 3. B.K. Bhatt, J.N. Desai, M.L. Jhingan; Demography, Vrinda Publication (P) Ltd.
- 4. A Bhende and T. Kanitkar, Revised ed; Principles of Population Studies, Himalayan Publishing House.
- 5. B.J Donald; Principles of Demography, John Wiley, New York.
- 6. B.D. Mishra; An Introduction to the Study of Population, South Asian Publishing, New Delhi.
- 7. National Family Health Survey Reports, Government of India.
- 8. Census of India Publications.
- 9. Bogue, D.J. (1971): Principles of Demography, John Wiley, NY.
- 10. Boserup, E. (1970): Women's Role in Economic Development, George Allen and Unwin, London.
- 11. Chiang, C.L. (1974): Life Tables and Mortality Analysis, W.H.O., Geneva.

12. 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 Univ. Press, Princeton.

13. King, M. and M.A. Hill (eds.) (1993): Women's Education in Developing Countries: Barriers, Benefits and Politics, John Hopkins, Baltimore.

Further Reading List

1. Lewis (ed.) (1989): Strengthening the Poor: What Have We Learnt, OECD, Paris.

2. Novell, C. (1988): Methods and Models in Demography, Bellhaven Press, London.

3. Proceedings of the International Population Conference (1989): Population: Today and Tomorrow – Policies, Theories and Methodologies, Vol. I, II & III, B.R. Publishing Corporation, Delhi.

4. Simon, J.L. (1992): Population and Development in Poor Countries, Princeton Univ. Press.

5. Srinivasan, K. (1998): Basic Demographic Techniques and Applications, Sage, ND.

SEMESTER- III Minor Research Project (2 credits Course) Max. Marks: 50 Marks

Course code: ECO-CR-305 Contract Hours: 30 Hours

 Minor Research Project Work shall be Discipline Centric to be carried out under the supervision of concerned teacher of the department. The project work shall be submitted in the form of a typed dissertation limited to a maximum of 25 pages soon after the completion the semester examination. The report will be evaluated by internally and followed by presentation of the work and viva voce. The project report will carry 50 marks (02 credits).

SEMESTER - III

Elementary Microeconomics (2 credits Course) Max. Marks: 50 Marks

Course code: ECO-GE-306 Contract Hours: 30 Hours

Course Objective: To develop basic understanding of Economics among students from Non-economics background.

Unit 1: Basics of Microeconomics

Meaning, Nature and Scope of Micro Economics; Importance and Limitations of Micro Economics; Distinction between Micro Economics and Macro Economics. Demand and Supply: Law of demand, Law of supply, increase and decrease in demand and supply, expansion and contraction in demand and supply, Market Price Determination. Elasticity of Demand: (Price, Income and Cross Elasticity of Demand).

Unit 2: Elasticity of Demand and Utility Analysis

Methods for Measuring Price Elasticity of Demand. Cardinal Utility Approach to Demand Analysis; Consumer Equilibrium under Cardinal Utility Approach. Indifference Curve: Meaning and Properties of Indifference Curve; Budget Line, Consumer's Equilibrium under Ordinal Utility Approach; Effect of Change in Income and Price on Consumer Equilibrium and breakup using Hicksian approach (only for normal goods).

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Varian H. R. (2010), Microeconomic Analysis – EWP and WW Norton and Co, Inc, New York.

2. Varian, H. R. (2010), Intermediate Microeconomics – A Modern Approach, EWP and WW Norton and Co, Inc, New York.

- 3. Whinston M. and Green (1995), Micro-economic Theory, Oxford University Press.
- 4. Pindyck R.S., D. Rubinfeld and P.L.Mehta (2012), Microeconomics, Pearson Education, South Asia.
- 5. Salvatore, D. (2010), Microeconomics; Theory and Applications, Oxford University Press, New Delhi.
- 6. Baumol, W.J. (1982), Economic Theory and Operational Analysis, Prentice Hall of India.

SEMESTER - III

An introduction to Indian Economy (2 credits Course)Course code: ECO-GE-307Max. Marks: 50 MarksContract Hours: 60 Hours

Course Objective: To develop basic understanding of Indian Economy among students from Non-economics background.

Unit 1: Some Aspects of Indian Economy

Population: Size & Growth; Age and Structure of Population and its Demographic Dividend; Urbanization and Indian Economic Development; Rural and Urban Migration; Importance of Human Resource Development in Indian Economy; Trends in Employment and Unemployment in India; Concept of Poverty-Line; Incidence of Poverty in India. Demographic Profile of Ladakh: Size, growth, literacy rate and sex ratio.

Unit 2: Basic Issues in Indian Agriculture and Industry

Role of Natural Resources and Infrastructure in Economic Development of India; Contribution of Agriculture in Indian Economy. Industrial Development under Plans; Trends in Industrial Production; Problems of Industrial Development in India; Role and Performance of Cottage & Small Scale Industries in India.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

- 1. Datt, R. And Sundharam: Indian Economy, S. Chand & Co. Ltd., New Delhi.
- 2. Dhingra, I.C.: Indian Economy, Sultan Chand & sons, New Delhi.
- 3. Dhar, P.K.: Growing Dimensions of Indian Economy, Kalayani Publishers, New Delhi.
- 4. Misra, S.K and Puri, V.K.: Indian Economy, Himalaya Publishing House, Mumbai.
- 5. Government of India, Economic Survey (Annual), Economic Division, Ministry of Finance, New Delhi.

Economics of Growth (4 credits Course) Max. Marks: 100 Marks

Course No: ECO-CR-401 Contract Hours: 60 Hours

Course Objectives: To acquaint students with the basic growth processes in the economy and make them understand the applicability of models undertaken by different countries in the path towards growth.

Unit I: Economic Growth

Growth-conceptual and theoretical perspectives; Technical Progress-Embodied and Disembodied; Hicks and Harrod; Learning by Doing; Production function approach to the analysis of growth; Accounting sources of growth; Classical theories of Growth

Unit II: Exogenous Economic Growth Models

Harrod and Domar models; Neo-classical Growth Models-Solow, Meade and Golden Rule of capital accumulation; Joan Robinson's Model of economic growth, Bastard golden age; Convergence Hypotheses of Solow-swan model; Mahalanobis model of Growth.

Unit III: Endogenous Economic Growth Models

New Growth Theory; the AK model; Romer Model of growth; Lucas's model of Growth; the Sidrauski Model- Optimal growth in a monetary economy; Contribution of education to Growth-Denison's and production function approach.

Unit IV: Growth theory Dependency and International Aspect

Models of regional growth and differences- Perbisch and Seers Dependency Theory and Unequal Exchange-A. G. Frank and Samir Amin Models of Export led growth; neoclassical supply side model; Balance of payments; constrained growth model and their application; virtuous circle model; the growth of world income and structural change.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Weil, D. N. (2009), Economic growth, Pearson education, India.

2. Gills, M. Perkins, Romer and Snodgrass (2009), Economics of development, W. W. Norton and Company, New York.

- 3. Thirlwall, A. P. (2014), Growth and development, Palgrave MacMillan, U.K
- 4. Todaro, M.P. and Smith (2013), Economic development, Pearson Education, Delhi
- 5. Barro, R. J. and Sala-i-Martin (2007), Economic Growth, Prentice Hall of India, New Delhi.
- 6. Barro, R. and X. Sala-i-Martin, Economic Growth, Prentice Hall India, New Delhi.
- 7. Branson, W, Macroeconomic Theory and Policy, Harper and Row
- 8. Chiang. A.C. Element of Dynamic Optimization, McGraw Hill 9

9. Sen, A.K., Growth Economics, Penguin, Harmondsworth.

- 10. Solow, R.M. Growth Theory An Exposition, Oxford University Press, Oxford.
- 11. Wan, I-1.Y., Economic Growth, Harcourt, Bracem, Jovanovich New York.

Further Reading List

1. Chiang, A.C. Fundamental Methods in Mathematical Economics, McGraw Hill.

- 2. Robinson, J, The Accumulation of Capital, Macmillan.
- 3. Domar, B, Essays in the Theory of Economic Growth, Oxford University Press.
- 4. Thirlwall, A.P. Growth and Development, Palgrave.
- 5. Harrod R.F., Towards a Dynamic Economics, Macmillan.
- 6. Evans, M. Macroeconomic Activity, Harper and Row
- 7. Kaldor N., Essays in Economic Growth and Stability, Gerald Ruckworth.

Contemporary Issues in Indian Economy (4 credits Course) Max. Marks: 100 Marks

Course No: ECO-CR-402 Contract Hours: 60 Hours

Course Objective: To sharpen the analytical faculty of the student, by highlighting an integrated approach to the functional aspects of the Indian economy.

Unit 1: Agriculture

Agricultural policy-costs and prices; Agricultural prices and PDS; Impact of public expenditure on agricultural growth; Agricultural taxation; Sustainability of agriculture and food security in India; Land acquisition.

Unit 2: Industry and Trade

Structure and composition of Industry – issues of concentration; large vs small industry; Industrial location; Small scale reservation policy; Trends and patterns of industrial growth; Foreign trade regime; protection and foreign competition; Productivity; Import substitution versus export; Competitiveness; Effect on export competitiveness.

Unit 3: Poverty, Inequality and Inflation

Poverty and exclusion; NREGA; Social security for unorganized sector; Unemployment—types, causes and consequences; Population pressure—economic effects; Inequality—extent, consequences and remedies; Regional imbalance—extent, consequences and remedies; Parallel economy in India—Demonetisation.

Unit 4: Infrastructure and Development

State of infrastructure – reforms, restructuring, pricing and regulation; Promoting investment in infrastructure – public and private partnership; Sectoral Issues –energy, transport, telecom and urban infrastructure and FDI; Human development indicators – review of change since early fifties, wide regional variations; Environmental protection – Sustainable Development Goals.

Instructions for paper setters and candidates

i. Examiner will set question paper in the given format-

- Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
- **Section-B** (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

1. Pulin,N. (2015), Economic Development of India (Critical Concepts in Economics), London & New York, Routledge.

2. Panagariya, A.(2008), India the Emerging Giant, Oxford University Press.

3. Krueger, A. (2003), Economic Policy Reforms and the Indian Economy, Oxford University Press.

4. Dandekar, V.M. (2004), The Indian Economy 1947-97; transforming traditional Agriculture Vol. I 5. Kurian, C.T. (1978), Poverty Planning and Social Transformations-An Alternative in Development Planning, Allied Publishers, New Delhi.

6. Bhagwati Jagdish and Arvind Panagariya (2013): Why Growth Matters: How Economic Growth in India Reduced Poverty and the Lessons for Other Developing Countries, Public Affairs.

- 7. Bhalla, G.S. (2007): Indian Agriculture since Independence, New Delhi: National Book Trust.
- 8. Byres, T.J. (1998) (Ed.): The Indian Economy: Major Debates since Independence, OUP, Delhi
- 9. Bardhan, P.K. (1999): Political Economy of Development in India, OUP, ND.
- 10. Chakravarty, S. (1987): Development Planning: The Indian Experience, OUP, ND.
- 11. Dantwala, M.L. (1996): Dilemmas of Growth: The Indian Experience, Sage, ND.

- 12. Drèze J. and A.K. Sen (2013), Uncertain Glory: India and Its Contradictions by, Princeton University Press.
- 13. Kapila, Uma (2015): Indian Economy: Performance and Policies: 2015 16, Academic Foundation.
- 14. Kapila, Uma (Ed) (2014): Indian Economy since Independence, 25th edition, Academic Foundation, Delhi.

15. Nagaraj R (Ed) (2012): Growth, Inequality and Social Development in India: Is Inclusive Growth Possible?, London, Palgrave Macmillan

16. Panagariya Arvind (2008): India: The Emerging Giant, Oxford University Press

- 17. Ray Partha (2013): Monetary Policy, Oxford India Short Introductions, OUP, New Delhi
- 18. Sandesara, J.C. (1992): Industrial Policy and Planning, 1947-91: Tendencies, Interpretation and Issues, Sage, ND.
- 19. Srivastava, D.K. (2005): Issues in Indian Public Finance New Century Publications, Delhi
- 20. Tendulkar, S.D and T.A. Bhavani (2007): Understanding Reforms- Post 1991 India, OUP.

21. Vaidyanathan, A. (2010): Agricultural growth in India: Role of technology, incentives and institutions, New Delhi: Oxford University Press.

Further Reading List

- 1. Ahluwalia, I.J and I.M.D. Little (Eds.) (1998): India's Economic Reforms and Development, OUP,
- 2. Bardhan, Pranab (1998): The Political Economy of Development in India, (2nd edition), OUP, Delhi.
- 3. Basu, K. (2007): The Oxford Companion to Economics in India, OUP.

Environmental Economics (4 credits Course) Max. Marks: 100 Marks

Course No: ECO-CR-403 Contract Hours: 60 Hours

Course Objectives: To provide a comprehensive knowledge relevant to the economic analysis of issues involving the environment.

Unit I: Fundamentals of Environmental Economics

Environmental Economics— meaning, scope and rationale; Environment and the economy—inter-linkages and trade-off; Property rights— Open Access and Common Property Resource; Resource; Externalities as a source of Market failure; public goods and bads, Sustainability: concept and indicators.

Unit II: Measurement of Environmental

Values Concept and types of environmental value; Valuation of benefits – Methodological issue; Hedonic pricing approach; Travel cost approach; Contingent valuation technique.

Unit III: Economics of Environmental Regulation

Rationale for regulation; Coasian approach; Pigovian taxes; Command and control methods; Economic incentives—Effluent and emission taxes; Tradable pollution permits; liability laws.

Unit IV: Trade, Environment and Climate Change

International Trade and Environment; Trade and domestic pollution; Trans-boundary pollution, Climate Change-Scientific Evidence and its ecological impact; the economics of global warming: Basic theoretical concepts and framework of analysis; the economic debates and policy implications of Global Warming — the _Business as usual approach (BAU), Gradualist approach; and Precautionary approach.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List:

- 1. Hussain, A.M. (1999), Principals of Environmental Economics, Rutledge, London.
- 2. Hanley N. (1999), Environmental Economics in theory and Practice, Macmillan India Ltd, New Delhi
- 3. Kolstad, C.D. (1999), Environmental Economics, Oxford University Press, New Delhi.

4. Singh K. and Shishodia A. (2011), Environmental Economics: Theory and Application, SAGE Publication India Pvt Ltd., New Delhi

- 5. Acharya R. (2013), Trade and Environment, Oxford University Press, New Delhi
- 6. Batacharya R.N. (2001), Environmental Economics—An Indian Perspective, Oxford University Press, New Delhi.
- 7. Pearson C. S. (2000), Economics and Global Environment, Cambridge University Press.

8. Baumol, W.J. and W.E. Oates (1988): The Theory of Environmental Policy (2e), CUP, Cambridge. 9. Fisher, A.C. (1981): Resource and Environmental Economics, CUP, Cambridge.

10. Kolstad, C.D. (1999): Environmental Economics, OUP, ND.

11. Pearce, D.W. and R. Turner (1991): Economics of Natural Resource Use and Environment, John Hopkins Press, Baltimore.

12. Tietenberg, T. (1994): Environmental Economics and Policy, Harper Collins, NY.

Further Reading List

1. Arrow, K.J., P. Dasgupta, I.H. Goulder, K.J. Mumford and K. Oleson (2012): "Sustainability and Measurement of Wealth", Environment and Development Economics, 17(3):317-53.

2. Dorfman and Dorfman (1977): Economics of the Environment (2e), W.W. Norton, NY.

3. Freeman A. Myrick III (1979). The Benefits of Environmental Improvement, Johns Hopkins Univ. Press, Baltimore.

4. Gibbons, R. (1992): Game Theory for Applied Economists, Princeton Univ. Press.

5. Kanemoto, Y. (1988): "Hedonic Price and the Benefits of Public Projects", Econometrica, Vol.56, pp. 981-989.

6. Kelly, D.L. (1997): "On Kuznets Curves Arising from Stock Externalities", Working Paper, Dept. of Economics, University of California, Santa Barbara, Oct.

7. Laffont, J. and J. Laffont (1977): "More on Prices vs. Quantities", Review of Economic Studies, Vol.44, pp.177-186.

8. List, A. J. and A.D. Zeeuw (Ed.) (2002): Recent Advances in Environmental Economics, Edward Elgar, Cheltenham, U.K.

9. Muthukrishnan, S. (2010): Economics of Environment, PHI Learning Private Ltd, New Delhi

10. Pigou, A.C. (1962): The Economics of Welfare (4e), Macmillan, London.

11. Sengupta, R. (2013): Ecological Limits and Economic Development: Creating Space, Oxford University Press, New Delhi.

12. Shafik, N. (1994): "Economic Development and Environmental Quality: An Econometric Analysis", Oxford Economic Papers, Vol.46, pp.757-773.

13. Shafik, N. and S. Bandyopadhyay (1992): "Economic Growth and Environmental Quality: Time Series and Cross-Country Evidence", Policy Research Working Paper WPS 904, The World Bank, Washington DC.

14. Shankar, U. (Ed.) (2001): Environmental Economics, OUP, ND.

Dissertation (8 credits Course) Max. Marks: 200 Marks

Course code: ECO-CR-404 Contract Hours: 120 Hours

- 1. Project Work shall be Discipline Centric to be carried out under the supervision of concerned teacher of the department. The project work shall be submitted in the form of a typed dissertation limited to a maximum of 100 pages soon after the completion of 4th semester examination. The report will be evaluated by one internal and one external examiner followed by presentation of the work and viva voce. The project report will carry 200 marks (08 credits) comprising 150 marks (06 credit) for dissertation and 50 marks (02 credit) for presentation and viva voce examination. Average of two examiners will be considered as final score out of 100 marks for dissertation while as evaluation for presentation and viva voce shall be made only by the external examiner.
- 2. Field visit and experience is compulsory part of project work. The project work / dissertation would be based on the field experience.

SEMESTER- IV Elementary Macro Economics (2 credits Course) Cou Max. Marks: 50 Marks Cor

Course No: ECO-GE-405 Contract Hours: 30 Hours

Course Objectives: To enable students from non- economic background to understand the basic concepts of macroeconomics and make a sharp distinction between classical and Keynesian thought.

UNIT 1: Introduction

Macroeconomics: Meaning, Nature and Scope; Macroeconomic variables-goods and money market, Importance and limitations of Macroeconomics, Circular Flow of Income-two sector, three sector, four Sector Model

UNIT 2: National Income Accounting

National Income- Meaning, Definitions and Concepts of GDP and related aggregates of National Income; Methods of measuring National Income; Difficulties in the measurement of National Income; Uses of National Income; Nominal GNP and Real GNP; Limitations of GDP concept.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3½ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List: 1. Andrew B. Abel, Ben S. Bernanke, Dean Croushore Macro Economics Seventh Edition Pearson Publication.

- 2. Errol D'Souza. Macro Economics, Second Edition, Pearson Publication.
- 3. J. Bradford Delong, Macroeconomics, International Edition.
- 4. B. S. Gardner, Macroeconomics, Third Edition.
- 5. Froyen, R. T. (2013), Macro Economics: Theories and Policies, Pearson Education
- 6. Branson, W.H. (2005), Macro Economics Theory and Policy, Harper & Row, New York
- 7. Romer, D. L. (2011), Advanced Macro Economics, McGraw Hill Company Ltd. New York
- 8. Dornbusch, E. and S. Fischer (1981), Macro Economics, McGraw Hill International, Auckland

Public Finance (2 credits Course) Max. Marks: 50 Marks

Course No: ECO-GE-406 Contract Hours: 30 Hours

Course Objectives: To enable students from non- economic background to understand the basic concepts of Public Finance and knowledge of Government finances with special reference to India.

UNIT 1: Nature and Scope of Public Finance

Public Finance: Meaning and Scope; Distinction between Public and Private Finance; Role and Importance of Public Finance in Developing Economies; Principle of Maximum Social Advantage.

UNIT 2: Public Revenue and Expenditure

Sources of Public Revenue; Taxation: Meaning and Classification; Canons of Taxation; Basic Features of GST. Public Expenditure: Meaning and Classification; Distinction between Public and Private Expenditure; Canons of Public Expenditure; Effects of Public Expenditure.

Instructions for paper setters and candidates

- *i.* Examiner will set question paper in the given format-
 - Section-A (Short Answer Type Question). One compulsory question with four sub-parts, one from each unit. Each short answer type question will carry 3¹/₂ marks, thus in total the question will carry 14 maximum marks.
 - Section-B (Long Answer Type Question). There will be one question from each unit with an option. Thus, in total there will be eight questions of which one will have to attempt four, one from unit. Each question will carry 14 maximum marks.
- *ii.* All questions will carry equal marks (14 marks each)
- *iii.* The students are required to attempt FIVE questions in all, ONE question from each unit and the Compulsory question of Section A.

Suggested Books

Essential Reading List: Jha, R: Modern Public Economics, Rutledge, London.

Lekhi, R.K: Public Finance, Kalyani Publishers, New Delhi.

Mithani, D.M:Modern Public Finance, Himalaya Publishing House, Mumbai.

Musgrave, R.A. and Musgrave, P.B: Public Finance in Theory and Practice, McGraw Hill, Tokyo.

Parkash, Om: Public Economics, Vishal Publishing Co., Delhi

Singh, S.K: Public Finance in Theory and Practice, S. Chand & Co., New Delhi.

Sundharam, K.P.M., Andley, K.K: Public Finance – Theory and Finance, S. Chand & Co., New Delhi.