Solapur University, Solapur

M. A. Economics

Choice Based Credit System

(CBCS)

w.e.f. June 2016-17

M. A. Part – I (Economics)
M. A. Part – I (Sem I and II) Economics w.e.f. 2016-17

Sem	Code	Title of the Paper	Semester Exam			L	T	P	Credits
			Theory	IA	Total				
First									
Economics		**Hard Core Papers**							
HCT	1.1	Micro Economic Analysis - I	70	30	100	4	0	0	4
HCT	1.2	Quantitative Techniques for Economics – I	70	30	100	4	0	0	4
HCT	1.3	Agricultural Economics	70	30	100	4	0	0	4
		Soft Core /Elective Paper (Any One)							
SCT	1.1	Agri-Business	70	30	100	4	0	0	4
SCT	1.2	Demography	70	30	100	4	0	0	4
		Practical/Field Work							
HCP	1.1	Practical Work – QTE- I	70	30	100	0	0	4	4
SCP	1.2	Practical/ Field Work - Applications	70	30	100	0	0	4	4
	1	**Tutorial**	00	25	25	0	1	0	1
		Total	**420**	**205**	**625**	**16**	**1**	**8**	**25**
Second									
Economics		**Hard Core Papers**							
HCT	2.1	Micro Economic Analysis - II	70	30	100	4	0	0	4
HCT	2.2	Quantitative Techniques for Economics – II	70	30	100	4	0	0	4
		Soft Core /Elective Paper (Any One)							
SCT	2.1	Computer Applications in Economics	70	30	100	4	0	0	4
SCT	2.2	Economics of Environment	70	30	100	4	0	0	4
		Open Elective (Any One)							
OET	2.1	Indian Economy	70	30	100	4	0	0	4
OET	2.2	Financial Markets and Institutions	70	30	100	4	0	0	4
		Practical/Field Work							
HCP	2.1	Practical Work – QTE-II	70	30	100	0	0	4	4
SCP	2.2	Practical/ Field Work - Applications	70	30	100	0	0	4	4
	1	**Tutorial**	00	25	25	0	1	0	1
		Total	**420**	**205**	**625**	**16**	**1**	**8**	**25**

M. A. Part – II (Economics)
M. A. Part – II (Sem III and IV) Economics w.e.f. 2017-18

Sem	Code	Title of the Paper	Semester Exam			L	T	P	Credits
			Theory	IA	Total				
Third									
Economics		**Hard Core Papers**							
HCT	3.1	Public Economics	70	30	100	4	0	0	4
HCT	3.2	Macro Economic Analysis	70	30	100	4	0	0	4
		Soft Core /Elective Paper (Any One)							
SCT	3.1	Research Methods in Economics	70	30	100	4	0	0	4
SCT	3.2	Tax and Tax Consultancy	70	30	100	4	0	0	4
		Open Elective (Any One)							
OET	3.1	Human Development	70	30	100	4	0	0	4
OET	3.2	Economics of Transport	70	30	100	4	0	0	4
		Practical/Field Work							
HCP	3.1	Practical/ Field Work - EXCEL	70	30	100	0	0	4	4
SCP	3.2	Practical/ Field Work - SPSS	70	30	100	0	0	4	4
	1	**Tutorial**	00	25	25	0	1	0	1
		Total	**420**	**205**	**625**	**16**	**1**	**8**	**25**
Four									
Economics		**Hard Core Papers**							
HCT	4.1	Monetary Economics	70	30	100	4	0	0	4
HCT	4.2	Economics of Growth and Development	70	30	100	4	0	0	4
HCT	4.3	Mathematical Economics	70	30	100	4	0	0	4
		Soft Core /Elective Paper (Any One)							
SCT	4.1	Principle and Practice of Co-operation	70	30	100	4	0	0	4
SCT	4.2	Economics of Industry and Labour	70	30	100	4	0	0	4
		Practical / Field Work							
HCP	4.1	Practical Work – Data Analysis	70	30	100	0	0	4	4
SCP	4.2	Dissertation	70	30	100	0	0	4	4
	1	**Tutorial**	00	25	25	0	1	0	1
		Total	**420**	**205**	**625**	**16**	**1**	**8**	**25**

L = Lecture, T = Tutorials, P = Practical/ Field Work

4 Credits of Theory = 4 Hours of Teaching Per Week

- Total Marks of the Course   : 2500 Marks

▪ Distribution of Marks

     o Theory Examination (Each Paper)   : 70 Marks

     o Internal Examination (Each Paper)   : 30 Marks

     o (Theory Examination will be of 70 marks of 2.30 hours)

▪ Distribution of Internal Marks: : 30 Marks

     1. Written Test 1   : 10 Marks

     2. Written Test 2   : 10 Marks

     3. Seminar/Presentation   : 10 Marks

▪ Standard of Passing: : 40 % Marks

     o Theory Examination   : 28 out of 70 Marks

     o Internal Examination   : 12 out of 30 Marks

▪ Workload:

     o Teaching/Practical Workload   : 04 Hours Per Paper/ Practical/Field Work

NATURE OF QUESTION PAPER AND SCHEME OF MARKING
M.A. (ECONOMICS) SEMESTER-I/II/III/IV EXAMINATION,

Total Marks: 70

Duration : 2 Hours 30 Minutes

Instructions: 1) All questions are compulsory. 2) All questions carry equal marks.

Q. No. 1: Multiple Choice Questions (2 Marks Each)　　　　　**14 Marks**

    (1) ……………………………………………………

    (2) ……………………………………………………

    (3) ……………………………………………………

    (4) ……………………………………………………

    (5) ……………………………………………………

    (6) ……………………………………………………

    (7) ……………………………………………………

Q. No. 2: Short Notes (Any Four out of Five)　　　　　**14 Marks**

    (1) ……………………………………………………

    (2) ……………………………………………………

    (3) ……………………………………………………

    (4) ……………………………………………………

    (5) ……………………………………………………

Q. No. 3: Short Answer Type Questions (Any Two out of Three)　　　　　**14 Marks**

    (1) ……………………………………………………

    (2) ……………………………………………………

    (3) ……………………………………………………

Q. No. 4: Descriptive Type Questions with internal choice　　　　　**14 Marks**

    (A) ……………………………………………………

                        Or

    (B) ……………………………………………………

Q. No. 5: Descriptive Type Question.　　　　　**14 Marks**

M. A. PART – I, SEMESTER- I

Hard Core Paper

Paper No: 1

MICRO ECONOMIC ANALYSIS- I

Preamble

This paper analyses the economic behaviour of individuals, firms and markets. It is mainly concerned with the objective of equipping the students in a rigorous and comprehensive manner with the various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs, the theory of traditional markets and equilibrium of firm in modern non-profit maximizing framework. The paper also deals with the micro and macro theories of distribution, welfare economics, and general equilibrium in closed and open systems and analysis of economic behaviour under uncertainty.

Unit-1. Introduction to Micro Economics   (15 Periods)

(A)   An Overview of Micro Economics, Meaning of Micro Economics Analysis; Positive and Normative Economics;

(B)   Uses and Limitations of Microeconomic Theories, Uses of Microeconomic Theories, Limitations of Microeconomic Theories;

(C)   What is and Economy, How Economy Works, Basic Problems of Economy, How Market Mechanism Solves the Basic Economic Problems

Unit-2: Theory of Demand   (15 Periods)

(A)   Theory of Consumer Behavior: The Cardinal Utility Theory, The Indifference Curve theory, The Revealed Preference Theory, The Consumer Surplus;

(B)   Derivation of Demand, Determinants Demand, Elasticities of Demand;

(C)   Recent Developments in theory of Market Demand- the Pragmatic Approach to Demand analysis;

Unit-3: Theory of Production and Costs   (15 Periods)

(A)   Production Function, Law of Production, Technological Progress and Production Function

(B)   Least cost combination of inputs; Multi-product firm; Elasticity of substitution;

(C)   Traditional and modern theories of costs;

Unit – 4: Price and Output Determination   (15 Periods)

(A)   Perfect Competition – Meaning, Features, Short term Equilibrium, Long term Equilibrium

(B)   Monopoly- Demand and Revenue, Equilibrium of the Monopolist (Short run and Long run),

(C)   Monopolistic competition – general and Chamberlin approaches to equilibrium, equilibrium of the firm and the group

BASIC READING LIST

1. Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.

2. Koutsoyiannis, A. (1979), Modern Microeconomics (2nd Edition), Macmillan Press, London.

3. Layard, P. R. G. and A. W. Alters (1978), Microeconomic Theory, McGraw Hill, New York.

4. Sen, A. (1999), Microeconomics: Theory and Applications, OxfordUniversity Press, New Delhi.

5. Stigler, G. (1996), Theory of Price, (4th Edition), Prentice Hall of India, New Delhi.

6. Varian, H. (2000), Microeconomic Analysis, W. W. Norton, New York.

7. Mishan, E. J. (1969), Welfare Economics: An Assessment, North Holland,   Amsterdam.

8. Archibald, G. C. (Ed.) (1971), Theory of the firm, Penguin, Harmondsworth.

9. Arrow, K. J. and M. D. Intrilligator (Eds.) (1981), Handbook of Mathematical Economics, Vol. I, North Holland, Amsterdam.

10. Bain, J. (1958), Barriers to New Competition, HarvardUniversity Press, Harvard.

11. Baumol, W. J. (1982), Economic Theory and Operations analysis, Prentice Hall of India, New Delhi.

12. Borch, K. H. (1968), The Economics of Uncertainty, PrincetonUniversity Press, Princeton.

13. Broadway, R. W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, London.

14. Bronfenbrenner, M. (1979), Income Distribution Theory, Macmillan, London.

15. Da Costa, G. C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.

16. Diamond and Rothschild (Eds.) (1978), Uncertainty in Economics, Academic Press, New York.

17. Graff, J. De V. (1957), Theoretical Welfare Economics, CambridgeUniversity Press, Cambridge.

18. Green, H. A. G. (1971), Consumer Theory, Penguin, Harmondsworth.

19. Green, H. and V. Walsh (1975), Classical and Neo-classical Theories of General Equilibrium, Oxford University Press, London.

20. Hansen, B. (1970), A Survey of General Equilibrium Systems, McGraw Hill, New York.

21. Healthfields and Wibe (1987), An Introduction to Cost and Production Functions, Macmillan, London.

22. Henderson, J. M. and R. E. Quant (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.

23. Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.

24. Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.

25. Weintrub, E. R. (1974), General Equilibrium Theory, Macmillan, London.

Hard Core Paper

Paper No: 2

QUANTITATIVE TECHNIQUES FOR ECONOMICS- I

Preamble

   The main objective of this paper is to train the students to use the techniques of mathematical and statistical analysis, which are commonly applied to understand and analyze economic problems. The emphasis of this paper is on understanding economic concepts with the help of mathematical methods rather than learning mathematics itself. Hence, in this paper a student will be initiated into various economic concepts, which are amenable to mathematical treatment. The paper also deals with simple tools and techniques, which will help a student in data collection, presentation, analysis and drawing inferences about various statistical hypotheses.

Unit – 1. Measures of Central Tendency: **(15 Periods)**

   A. Mean- Individual, Discrete and Continuous Series

   B. Median-Individual, Discrete and Continuous Series

   C. Mode-Individual, Discrete and Continuous Series

Unit – 2. Dispersion Analysis: **(15 Periods)**

   A. Range-Individual, Discrete and Continuous Series

   B. Standard Deviation-Individual, Discrete and Continuous Series

   C. Coefficient of Variation-Individual, Discrete and Continuous Series

Unit – 3. Correlation Analysis: **(15 Periods)**

   A. Type of Correlation

   B. Scatter Diagram

   C. Karl Pearson's Coefficient of Correlation,

   D. Spearman's Rank coefficient of Correlation.

Unit - 4. Regression Analysis: **(15 Periods)**

   A. Importance of Regression Techniques.

   B. Regression line of Y on X

   C. Regression line of X on Y

BASIC READING LIST

1. Allen, R. G. D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS, London.

2. Chiang, A. C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.

3. Gupta, S. C. (1993), Fundamentals of Applied Statistics, S. Chand & Sons., New Delhi.

4. Handry, A. T. (1999), Operations Research, Prentice Hall of India, New Delhi.

5. Speigal, M. R. (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.

6. Taha, H. A., (1997), Operations Research: An Introduction (6th Edition), Prentice Hall of India Pvt. Ltd., New Delhi.

7. Yamane, Taro (1975), Mathematics for Economists, Prentice Hall of India, New Delhi.

8. Baumol, W. J. (1984), Economic Theory and Operations Analysis, Prentice Hall, Englewood Cliffs, New Jersey.

9. Monga, G. S. 91972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.

10. Vygodsky, G. S. (1971), Mathematics Handbook (Higher Mathematics), Mir Publishers, Moscow.

11. Mathur, P. N. and R. Bharadwaj (Eds.) (1967), Economic Analysis in Input-Output Research, Input-Output Research Association of India, Pune.

12. Hadley, G. (1962), Linear Programming, Addison Wesley Publishing Co., Massachusetts.

13. Kothari, C. R. (1992), An Introduction to Operations Research, Vikas Publishing House, New Delhi.

14. Mustafi, C. K. (1992), Operations Research: Methods and Practice, Wiley Eastern, New Delhi.

15. Chou, Y. (1975), Statistical Analysis, Holt, Reinhart and Winston, New York.

16. Croxton, Crowden and Klein (1971), Applied General Statistics, Prentice Hall of India, New Delhi.

17. Millar, J. (1996), Statistics for Advanced Level, CambridgeUniversity Press, Cambridge.

18. Nagar, A. L. and R. K. Das (1993), Basic Statistics, OxfordUniversity Press, New Delhi.

19. Goon, A. M., M. K. Gupta and B. Dasgupta (1993), Fundamentals of Statistics, Vol. 1, The World Press Ltd., Calcutta.

20. Hogg, R. V. and A. T. Craig (1970), Introduction to Mathematical Statistics (3rd Edition), Macmillan Publishing Co., New York.

21. Sukhatme, P. V. and B. V. Sukhatme (1970), Sampling Theory of Survey with Applications, LowaStateUniversity Press, Ames.

Soft Core / Elective Paper

Paper No: 1

AGRICULTURAL ECONOMICS

PREAMBLE

The objective of this course is to provide a detailed treatment of issues in agricultural economic to those intending to specialize in this area. Its objective is to familiarize students to analyze the issues related with agricultural and economic development, agricultural production function, agricultural demand and supply, marketing and prices, agricultural finance, using basic micro-economic concepts.

Unit 1: Introduction to Agricultural Economics: (15 Periods)

   A. Definition, nature and scope of agricultural economics,

   B. Difference between agriculture and industry,

   C. Nature of uncertainty in agriculture,

   D. Role of agriculture in economic development.

Unit 2: Economics of Agricultural Production: (15 Periods)

   A. Production Function: law of diminishing returns- optimum use of inputs, new technology and shift in production function.

   B. Resource Combination: factor-factor relationship, substitute, compliments, optimum factor combination, expansion path.

   C. Product   Combination: Product-Product Relationship, optimum product combination

Unit 3: Demand for and Supply Response in Agriculture: (15 Periods)

   A. Demand for agricultural products: Different purpose of demand, factors-affecting demand, demand for resources.

   B. Elasticity of demand: price elasticity, income elasticity and cross elasticity

   C. Supply Response in Agriculture: Agricultural supply and its peculiarities, factor's affecting agricultural supply.

Unit 4: Marketing and Prices of Agricultural Products: (15 Periods)

   A. Agricultural Marketing: Meaning, marketing functions, marketing structure, marketing channels,

   B. Major problems of agricultural marketing, measures for solving marketing problems,

   C. Agricultural Prices: Significance of agricultural prices, nature of price fluctuations: seasonal, annual, cyclical and secular

BASIC READING LIST:

1. Agriculture in Economic Development (1964), Carl Eicher and Lawrence Wit, McGraw Hill Book Company, New York

2. Bilgram, S. A. R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.

3. Christopher Ritson (1977), Agricultural Economics – Principles and Policy, CzosbyLuckwood Staples, London

4. Donald J. Epp& John W. Malone (1981), Introduction to Agricultural Economics, Mc-Million Publishing Company, Inc. New York.

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

6. Ghatak, S. and K. Ingerscent (1984), Agriculture and Economic Development, Select books, New Delhi.

7. Government of India, Five Year Plans, New Delhi.

8. Harold G. Halcrow, (1981), Economic of Agriculture, Mc-Graw Hill, International Book Company, Tokyo.

9. John W. Goodwin (1977), Agricultural Economics, Reston Publishing Company, Virginia.

10. John B. Penson, Oral Capps, C. Parr Rosson, (1999), Introduction to Agricultural Economics, Prentice Hall, New Jersey.

11. Martin Upton, (1976), Agriculture, Production Economics and Resource – Use, OxfordUniversity Press, London

12. Meier, G. M. (1995), Leading Issues in Economic Development, Oxford University Press, New Delhi.

13. Peter Robb (ed), (1996), Meanings of Agriculture, Oxford University Press, Delhi.

14. Raj, K. N. et. al. (1988), Essays in Commercialization of Indian Agriculture, OxfordUniversity Press, New Delhi.

15. Thamarajakshi, R. (1994), Intersectoral Relationship in a Developing Economy, Academic Foundation, Delhi.

16. Papola, T. S. (1982), rural Industrialization in India, Himalaya Publishing House, Bombay.

17. Sadhu A. N. & Singh Amarjit, Fundamentals of Agricultural Economics, (1996), Himalaya Publishing House, Bombay.

18. Soni, R. N. (1995), Leading Issues in Agricultural Economics, Arihant Press, Jalandhar.

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

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

<center>**Soft Core / Elective Paper**</center>
<center>**Paper No:1**</center>

AGRI-BUSINESS

Preamble:

 The purpose of this paper is to enable students to have an understanding various issues of agribusiness so that they would be able to comprehend and critically appraise current problem associated with agri-business in India.

Unit 1: Introduction of Agriculture and Agri-business   **(15 Periods)**

 A. Nature of Agriculture,

 B. Meaning, Nature and scope of agri-business,

 C. Difference between farm and non-farm sector,

Unit 2: Agricultural Technology and Irrigation: **(15 Periods)**

 A. Green Revolution–

 B. White Revolution (Dairy) –

 C. Blue Revolution (Fisheries)-

 D. Use of Biotechnology and Mechanical Technology

 E. Sources of Irrigation – Progress of Irrigation in India

Unit 3: Agricultural Marketing and Prices: **(15 Periods)**

 A. Regulated Marketing –

 B. Co-operatives Marketing –

 C. International Trade of Agricultural Produce –

 D. WTO and Agriculture.

 E. Agricultural Price Policy: its objectives,

 F. Price and Income Stabilization measures,

 G. Minimum Support Price, CACP

 H. Terms of Trade between Agriculture and Non-agricultural sector.

Unit 4: Agricultural Finance and Agro-industries   **(15 Periods)**

 A. Source of Agricultural Finance– Institutional System of Agricultural Finance.

 B. NABARD and Co-operative Credit for Agriculture Sector.

 C. Agro-industries: Role of Agro-industries in rural area,

 D. Problems of rural industry, measures for development of rural industry

 E. Agro- processing industries in India:

   (a) Sugar Industries

   (b) Textile Industries

BASIC READING LIST:

1. Agriculture in Economic Development (1964), Carl Eicher and Lawrence Wit, McGraw Hill Book Company, New York

2. Bilgram, S. A. R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.

3. Christopher Ritson (1977), Agricultural Economics – Principles and Policy, CzosbyLuckwood Staples, London

4. Donald J. Epp& John W. Malone (1981), Introduction to Agricultural Economics, Mc-Million Publishing Company, Inc. New York.

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

6. Ghatak, S. and K. Ingerscent (1984), Agriculture and Economic Development, Select books, New Delhi.

7. Government of India, Five Year Plans, New Delhi.

8. Harold G. Halcrow, (1981), Economic of Agriculture, Mc-Graw Hill, International Book Company, Tokyo.

9. John W. Goodwin (1977), Agricultural Economics, Reston Publishing Company, Virginia.

10. John B. Penson, Oral Capps, C. Parr Rosson, (1999), Introduction to Agricultural Economics, Prentice Hall, New Jersey.

11. Martin Upton, (1976), Agriculture, Production Economics and Resource – Use, Oxford University Press, London

12. Meier, G. M. (1995), Leading Issues in Economic Development, Oxford University Press, New Delhi.

13. Peter Robb (ed), (1996), Meanings of Agriculture, Oxford University Press, Delhi.

14. Raj, K. N. et. al. (1988), Essays in Commercialization of Indian Agriculture, Oxford University Press, New Delhi.

15. Thamarajakshi, R. (1994), Intersectoral Relationship in a Developing Economy, Academic Foundation, Delhi.

16. Papola, T. S. (1982), rural Industrialization in India, Himalaya Publishing House, Bombay.

17. Sadhu A. N. & Singh Amarjit, Fundamentals of Agricultural Economics, (1996), Himalaya Publishing House, Bombay.

18. Soni, R. N. (1995), Leading Issues in Agricultural Economics, Arihant Press, Jalandhar.

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

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

Soft Core / Elective Paper
Paper No:2

DEMOGRAPHY

Unit 1: Theories of Population and Population size and Growth: (15 Periods)

   A. Pre-Malthusian, Malthusian and Post-Malthusian theories,

   B. Optimum population, Demographic transition,

   C. Trends in population in the world during the last fifty years, variations in the growth rates of population.

Unit 2: Sex and Age Structure: (15 Periods)

   A. Determinants of sex and age structure,

   B. Demographic effect of sex and age structure, economic and

   C. Social implications of sex and age structure.

Unit 3: Fertility, Nuptiality and Mortality: (15 Periods)

   A. Estimation of fertility rates, factors affecting fertility rates,

   B. Marital status, change in age pattern of marriage,

   C. Estimation and determinants of mortality rates, foetal and infant mortality.

Unit 4: Migration and Urbanization and Population Policy: (15 Periods)

   A. Kids of migration, determinants and consequences of migration with reference to India,

   B. Growth of urban population, factors affecting urbanization, trends in urbanization in India.

   C. Population policy and programmes in India, Policies for fertility regulation and family welfare programms.

BASIC READING LIST:

1. Srinivasan K., Regulation of Reproduction in India, Population.

2. Rodgers, G., Population Growth and Poverty in Rural South Asia.

3. Agrawal, S.N. India's Population Problems.

4. Styrock, H., Population, Poverty and Employments : Methods and Materials of Demography.

5. David, K., World Urbanization, Vol. II, University of California.

6. UND, Human Development Report

7. United Nation : The Determinants and Consequences of Population.

8. Row B. Sheela, Women Consciousness, Maris World, Penguin, Harmondsworth.

9. Boserup : Women's Role in Economic Development, George Allen and Urwin London, 1970.

10. UNESCO : Women Studies and Social Scientists in Asia, Bangkok.

11. Ashok Mitra : Implications of Declining Sex Ratio in India's Population, ICSSR, New Delhi, 1979.

12. Nanda R. : Indian Women, : From Pardah to Modernity, Vikas, New Delhi, 1976.

13. Mujumdar, Vina : Symbols of Power : Studies on the Political Status of Women in India, Allied, New Delhi.

14. Mitra, Ashok : The Status of Women Literacy and Employment, Allied Publication, Bombay, 1979.

15. Amseden A.H. (Ed.) : The Economic of Women and Work, Penguin, Harmondworth.

16. Engles, F., : Women's Participation in the Economic Activity of Asian Countries, ILO Document DPW/10.

17. Redciff N. and E. Mingione (Ed.) : Beyond Employment : Household, Gender, Subsistence Basil Backwell Oxford UK, 1985.

18. Nancy Birdsall and Richarch Sabof : Unfair Advantage : Labour Market discrimination in developing countries.

19. Lloyd, C.B., Andrews, E.S. and Gilroy, C.L. : Women in the Labour Market, Colombia University Press, New York, 1979.

Practical/ Field Work
Paper No: 1

Total Marks: 100
(Report Writing = 70 Marks and
Written and Oral Examination: 30 Marks)
Teaching/Practical Workload: 4 Hours Per Week

Quantitative Techniques : Problems And Solutions- I

Unit – 1. Problems on Measures of Central Tendency: **(15 Periods)**

     Mean- Individual, Discrete and Continuous Series

     Median-Individual, Discrete and Continuous Series

     Mode-Individual, Discrete and Continuous Series

Unit – 2. Problems on Dispersion Analysis: **(15 Periods)**

     Range-Individual, Discrete and Continuous Series

     Standard Deviation-Individual, Discrete and Continuous Series

     Coefficient of Variation-Individual, Discrete and Continuous Series

Unit – 3. Problems on Correlation Analysis: **(15 Periods)**

     Karl Pearson's Coefficient of Correlation,

     Spearman's Rank coefficient of Correlation.

Unit - 4. Problems on Regression Analysis: **(15 Periods)**

     Regression line of Y on X

     Regression line of X on Y

Practical/ Field Work

Paper No: 2

Total Marks: 100

(Report Writing = 70 Marks and

Written and Oral Examination: 30 Marks)

Teaching/Practical Workload: 4 Hours Per Week

Application of Concept/Theory/Issues - I

The Student shall produce the report for assessment on any Ten points of following information before the University Theory examination.

Unit 1: Demand, Production, Costs and Market (15 Periods)

Application of Theory of Demand

Application of Elasticity of Demand

Application of Theory of Production and Costs

Application of Monopoly and Monopolistic competition

Unit 2: Issues in Agricultural Economics (15 Periods)

Issue of uncertainty in agriculture

Application of agricultural production function

Application of Elasticity of Demand in Agriculture

Unit 3: Issues in Agri-Business (15 Periods)

Impact of Irrigation

Issues of Agricutural Marketing and

Issues in Prices of Agricultural Products

Issues in agricultural sector

Unit 4: Issues in Demograpgy (15 Periods)

Factors affecting fertility rates,

Child Marriage and change in age pattern of marriage,

Issue of infant mortality

Issue of growth of urban population

M. A. PART – I, SEMESTER- II

Hard Core Papers

Paper No: 1

MICRO ECONOMIC ANALYSIS- II

Unit-1: Price and Output Determination   (15 Periods)

(A) Oligopoly – Non-collusive - Cournot, Bertrand, Edgeworth, Chamberlin, Kinked demand curve and Stackelberg's solution

(B) Collusive - Cartels and Price leadership

(C) Price and output determination under Monopsony and Bilateral monopoly.

Unit-2: Alternative Theories of the Firm and Distribution   (15 Periods)

(A) Critical evaluation of marginal analysis; Baumol's sales revenue maximization model; Williamson's model of managerial discretion;

(B) Marris model of managerial enterprise; Full cost pricing rule; Bain's limit pricing theory ;

(C) Neo-classical approach– Marginal productivity theory; Product exhaustion theorem;

Unit-3: General Equilibrium Theory   (15 Periods)

(A) Independence in the Economy-(circular flows of in two-sector economy)

(B) The Walrasian System

(C) Existence, Uniqueness and Stability of an Equilibrium (Stable, Unstable, Multiple equilibrium)

Unit-4. Welfare Economics   (15 Periods)

(A) Criteria of Social Welfare- Growth of GNP, Bentham's criteria, A Cardinalist Criterion, The Pareto-Optimality Criterion, Kaldor-Hicks Compensation Criterion;

(B) Maximization of Social Welfare- Derivation of the Grand Utility Possibility Frontier, Determination of the Welfare-MaximizingState;

(C) Determination of the Welfare-Maximizing Output-Mix, Commodity Distribution and Resource Allocation

BASIC READING LIST

1. Mishan, E. J. (1969), Welfare Economics: An Assessment, North Holland, Amsterdam.

2. Archibald, G. C. (Ed.) (1971), Theory of the firm, Penguin, Harmondsworth.

3. Arrow, K. J. and M. D. Intrilligator (Eds.) (1981), Handbook of Mathematical Economics, Vol. I, North Holland, Amsterdam.

4. Bain, J. (1958), Barriers to New Competition, HarvardUniversity Press, Harvard.

5. Baumol, W. J. (1982), Economic Theory and Operations analysis, Prentice Hall of India, New Delhi.

6. Borch, K. H. (1968), The Economics of Uncertainty, PrincetonUniversity Press, Princeton.

7. Broadway, R. W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, London.

8. Bronfenbrenner, M. (1979), Income Distribution Theory, Macmillan, London.

9. Da Costa, G. C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.

10. Diamond and Rothschild (Eds.) (1978), Uncertainty in Economics, Academic Press, New York.

11. Graff, J. De V. (1957), Theoretical Welfare Economics, CambridgeUniversity Press, Cambridge.

12. Green, H. A. G. (1971), Consumer Theory, Penguin, Harmondsworth.

13. Green, H. and V. Walsh (1975), Classical and Neo-classical Theories of General Equilibrium, Oxford University Press, London.

14. Hansen, B. (1970), A Survey of General Equilibrium Systems, McGraw Hill, New York.

15. Healthfields and Wibe (1987), An Introduction to Cost and Production Functions, Macmillan, London.

16. Henderson, J. M. and R. E. Quant (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.

17. Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.

18. Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.

19. Weintrub, E. R. (1974), General Equilibrium Theory, Macmillan, London.

Hard Core Papers

Paper No: 2

QUANTITATIVE TECHNIQUES FOR ECONOMICS- II

Unit- 1.Time Series Analysis: **(15 Periods)**

A. Measurement of trend: Free hand/ Graphic Method,

B. Semi-Average Method, Moving – Average Method, and

C. Method of Least Square-fitting a straight line trend.

Unit- 2. Growth Rates: **(15 Periods)**

A. Growth Rates: Importance

B. Simple Growth Rate – with Two and Many Observations

C. Compound Growth Rate - with Two and Many Observations

Unit-3. Index Numbers: **(15 Periods)**

A. Meaning and Importance of Index Number

B. Types of Index Number

C. Price Index Number

   Simple Index Number,

   i)   Simple Aggregative Method

   ii) Simple Averge of Price Relative Method

   Weighted Index Number

   i)   Weighted Aggregative Method

      a)   Laspeyre's Index Number

      b)   Paasche's Index Number

      c)   Fisher's Index Number

      d)   Marshall-Edgewarth's Index Number

      e)   Dorbish-Bowley's Index Number

      f)   Walseche's Index Number

      g)   Kelly's Index Number

   ii) Wighted Agverge of Price Relative Method

D. Quantity Index Numbers,

E. Value Index Numbers.

Unit- 4.Diagrammatic Presentation of Data: (15 Periods)

    A. Line Graph: Simple, Multiple, Component, Percentage Graph

    B. Bar Diagram: Simple, Multiple, Component, Percentage Graph

    C. Pie Chart:

    D. Histogram:

    E. Frequency Polygon:

    F. Ogive Curve

BASIC READING LIST

1.   Allen, R. G. D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS, London.

2.   Chiang, A. C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.

3.   Gupta, S. C. (1993), Fundamentals of Applied Statistics, S. Chand & Sons., New Delhi.

4.   Handry, A. T. (1999), Operations Research, Prentice Hall of India, New Delhi.

5.   Speigal, M. R. (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.

6.   Taha, H. A., (1997), Operations Research: An Introduction (6th Edition), Prentice Hall of India Pvt. Ltd., New Delhi.

7.   Yamane, Taro (1975), Mathematics for Economists, Prentice Hall of India, New Delhi.

8.   Baumol, W. J. (1984), Economic Theory and Operations Analysis, Prentice Hall, Englewood Cliffs, New Jersey.

9.   Monga, G. S. 91972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.

10.   Vygodsky, G. S. (1971), Mathematics Handbook (Higher Mathematics), Mir Publishers, Moscow.

11.   Mathur, P. N. and R. Bharadwaj (Eds.) (1967), Economic Analysis in Input-Output Research, Input-Output Research Association of India, Pune.

12.   Hadley, G. (1962), Linear Programming, Addison Wesley Publishing Co., Massachusetts.

13.   Kothari, C. R. (1992), An Introduction to Operations Research, Vikas Publishing House, New Delhi.

14.   Mustafi, C. K. (1992), Operations Research: Methods and Practice, Wiley Eastern, New Delhi.

15.   Chou, Y. (1975), Statistical Analysis, Holt, Reinhart and Winston, New York.

16.   Croxton, Crowden and Klein (1971), Applied General Statistics, Prentice Hall of India, New Delhi.

17.   Millar, J. (1996), Statistics for Advanced Level, CambridgeUniversity Press, Cambridge.

18.   Nagar, A. L. and R. K. Das (1993), Basic Statistics, OxfordUniversity Press, New Delhi.

19.   Goon, A. M., M. K. Gupta and B. Dasgupta (1993), Fundamentals of Statistics, Vol. 1, The World Press Ltd., Calcutta.

20.   Hogg, R. V. and A. T. Craig (1970), Introduction to Mathematical Statistics (3rd Edition), Macmillan Publishing Co., New York.

Soft Core/ Elective Paper

Paper No: 1

COMPUTER APPLICATIONS IN ECONOMICS

Preamble

Economics being an empirical science, computers have emerged as the pivotal instruments of economic analysis, research and forecasting. Therefore, the students must be equipped with skills and tools based on computers, which, this course shall provide to them. This will not only enhance their employability but also prepare them for the challenges of the future.

Unit-1. Introduction to Computer and Microsoft Excel: **(15 Periods)**

- A. Basic components of computer
- B. Input Devices,
- C. Output Devices,
- D. Excel Main Menu,
- E. Worksheet structure,

Unit-2. Descriptive Statistics, Correlation and Regression: **(15 Periods)**

- A. Arithmetic Mean, Median, Mode,
- B. Range, Standard Deviation and Coefficient of Variation
- C. Karl Pearson's Coefficient of Correlation
- D. Regression Equations of Y on X and X on Y

Unit-3. Time Series Analysis and Growth Rates **(15 Periods)**

- A. Time Series Analysis:Semi-average Method, Moving Average Method
- B. Method of Least Square-fitting a straight line trend.
- C. Growth Rates: Simple Growth Rate, Compound Growth Rate

Unit-4. Graphical Presentation of Data: **(15 Periods)**

- A. Line Graph: Simple Line Graph, Multiple Line Graph
- B. Bar Diagram: Simple Line Graph, Multiple Line Graph
- C. Pie Chart, Histogram and Ogive Curve

PRACTICAL COURSE

Practical Examination (30 Marks)

1) Practical examination will be conducted before the commencement of the theory examination.

2) Practical examination shall be of 1 hour duration carrying **30 marks**. Five/Six Statistical Problems shall be set for the practical examination.

3) To pass in the practical examination the student shall have to get minimum 40 per cent out of a total of 30 marks (that is, 12 marks out of 30).

Theory Examination (70 Marks)

Theory Examination will be of 70 marks of 2 hours 30 Minutes.

Teaching Workload   : 04 Hours

Practical Workload   : 04 Hours (for each batch)

Minimum Passing: : 28 out of 70   : Theory Examination

                                12 out of 30 : Practical Examination

BASIC READING LIST :

1) Elhance, D. N. (1962), Fundamentals of Statistics, KitabMahal, Allahabad.

2) Gupta, S. C. (1981), Fundamentals of Statistics, Himalaya Publishing House, Bombay.

3) Gupta, S. C. (1993), Fundamentals of Applied Statistics, S. Chand & Sons., New Delhi.

4) Handry, A. T. (1999), Operations Research, Prentice Hall of India, New Delhi.

5) Kothari, C. R. (1992), An Introduction to Operations Research, Vikas Publishing House, New Delhi.

6) Mathur, P. N. and R. Bharadwaj (Eds.) (1967), Economic Analysis in Input-Output Research, Input-Output Research Association of India, Pune.

7) Monga, G. S. 91972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.

8) N. M. Downie and R. W. Heath (1970), Basic Statistical Methods, Harper and Row, New York.

9) Rajaram,V, (1996), Fundamentals of Computers, Prentice Hall of India, New Delhi.

10) Sanders, D. H. (1988), Computer Today, McGraw Hill, New York.

11) Sinha, P. K. (1992), Computer Fundamentals, BPB Publications, New Delhi.

12) Speigal, M. R. (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.

13) Taha, H. A., (1997), Operations Research: An Introduction (6th Edition), Prentice Hall of India Pvt. Ltd., New Delhi.

14) Yamane, Taro (1973), Statistics, An Introductory Analysis, Harper and Row (India) and John Weatherhill Inc., Tokyo.

Soft Core/ Elective Paper

Paper No: 2

ECONOMICS OF ENVIRONMENT

Preamble

Due to the speedy growth of industries and population there is an increasing demand for the environmental resources. The free goods in the nature have now become the priced goods in the economy. The various types of pollutions have created the problems to the human beings as well as the biosphere. This paper highlights the causes of pollution, its economic impacts and the role of government, NGOs, in environment protection.

Unit-1 : Nature and Significance of Economics of Environment :   (15 Periods)

(A) Economic development and environmental problems – Depletion of common property resources and its impact –

(B) Eco-systems - Loss of bio-diversity

(C) Sustainable development.

Unit-2 :Industrial Development and Environmental Problems   (15 Periods)

(A) Water pollution – Air Pollution – Noise Pollution -

(B) Depletion of ozone layer –Green House Effects –

(C) Limits to growth theory.

Unit-3 : Agricultural Development and Environmental Problems :   (15 Periods)

(A) Technological changes in agriculture and its impact on environment – Excess use of water, fertilizers and pesticides –

(B) Concept of natural farming

(C) Causes of forest depletion and its impact – Significance of social forestry.

Unit-4 : Environment protectionand Environmental Policy :   (15 Periods)

(A) Role of public, private and co-operative sectors in environment protection – WWF and Chipco Movement.

(B) Cost benefit analysis and environment – Environment impact assessment Environmental audit.Economics of recycling – Types of energy – Energy production from waste – Pollution tax –

(C) India's environmental Policy – Environmental Protection Laws in India, Pollution Control Boards and Their Functions.

BASIC READING LIST

1) Baumol, W. J. & W. E. (1997), The Theory of Environmental Policy, Prentice Hall, Englewood-Cliffs.

2) Bhardwaj, R. (1983), Managing Limits to Growth, Asian and Pacific Development Centre, Kula Lumpur.

3) Dorfman, R. & N. Dorfman (Eds.) (1977), Economics of the Environment, W. W. Norton, New York.

4) Nijkamp, P. (Ed.) (1976), Environmental Economics, Vol. I & II, MartinusNijhoft, Leiden.

5) Charles Peering (1987), Economy and EnvironmentCambridgeUniversity Press, New York.

6) Ali, S. A. (1979), Resources for Future Economic Growth, Vikas Publishing House, New Delhi.

7) Rathore, M. S. (Ed.) (1996), Environmental and Development, Rawat Publications, Jaipur.

8) Garge, M. R. (Ed.) (1996), Environmental Pollution and Protection, Deep and Deep Publications, New Delhi.

9) Lodha, S. L. (Ed.) (1991), Economics of Environment, RBSA Publishers, Jaipur.

10) Rajlakshmi N. and Dhulasi B. (1994), Environomics, Allied Publishers Ltd., New Delhi.

11) Singh, G. N. (Ed.) (1991), Environmental Economics, Mittal Publications, New Delhi.

12) Mehta, C. S. (1994), Environment and Law, RBSA Publishers, New Delhi.

13) Karpagam, M. (1993), Environmental Economics, Sterling Publishers, New Delhi.

14) World Bank Report on Human Development.

15) The Hindu Survey of Environment: Annual Reports.

16) R. N. Bhattacharya (2006), Environmental Economics : An Indian Perspective, OxfordUniversity Press, New Delhi.

17) Ulaganathan, Sankar (2006), Environmental Economics, OxfordUniversity Press, New Delhi.

18) Hanley, Shogren and White (2004), Environmental Economics in Theory and Practice, McMillan India Limited, Delhi.

Open Elective Paper

Paper No: 1

INDIAN ECONOMY

Preamble

The objective of this Paper at the postgraduate level would be to sharpen the understanding of integrated approach to the functioning aspects of the Indian economy. Such an analysis is essential because the Indian economy is a unique amalgam of alternative competing and often conflicting theories and a proper understanding of its working is imperative if the student is to comprehend the ramifications that underlie most of the observed phenomena in the Indian economic set-up

Unit- 1: Economic Planning in India: (15 Periods)

A) Economic Planning- Meaning, Objectives of Economic Planning,

B) Planning in India-

C) Strategy of Plan- Strategy of First Five Year Plan to Twelveth Five Year Plan

Unit-2: Agricultural Sector: (15 Periods)

A) Green revolution, and agricultural price policy

B) Agricultural Finance;

C) Agricultural Marketing

D) Public distribution system

Unit-3: Industrial Sector: (15 Periods)

A) Public Sector enterprises and their performance;

B) Privatization and disinvestment

C) Growth and pattern of industrialization; Small-scale sector;

Unit- 4: Public Finances and Financial Sector Reform: (15 Periods)

A) Fiscal federalism–Finances of central government; Finances of state governments;

B) Financial sector reforms;

C) Monetary policy of RBI; Money and capital markets;

D) Working of SEBI in India.

BASIC READING LIST
1. Ahluwalia, I. J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
2. Ahluwalia, I. J. and I. M. D. Little (Eds.) (1999), India's Economic Reforms and Development (Essays in honour of Manmohan Singh), Oxford University Press, New Delhi.
3. Bawa, R. s. and P. S. Raikhy (Ed.) (1997), Structural Changes in Indian Economy, GuruNanak Dev University Press, Amritsar.
4. Bhagwati, J. N. and P. Desai (1970), India: Planning for Industrialization, Oxford University Press, London.
5. Bhargava, P. K. (1991), India's Fiscal Crisis, Ashish Publishing House, New Delhi.
6. Bhole, L. M. (2000), Indian Financial System, Ghugh Publications, Allahabad.
7. Brahmananda, P. R. and V. R. Panchmukhi (Eds.) (2001), Development Experience in theIndian Economy: Inter-State Perspectives, Book well, Delhi.
8. Chelliah, Raja J. (1996), Towards Sustainable Growth – Essays in Fiscal and Financial Sector Reforms in India, Oxford University Press, New Delhi.
9. Dandekar, V. M. (1996), The Indian Economy, 1947-92, Vol. II, Sage Publications, NewDelhi.
10. Datta, B. (1978), Economics of Industrialization, TheBookland, Calcutta.
11. Dutt and Sunderam (2016), Indian Economy, 72th Edition, S Chand and Company, New Delhi.
12. Government of India, Economic Survey (Annual), Ministry of Finance, New Delhi.
13. Gupta, S. P. (1998), Post-Reform India: Emerging Trends allied Publishers, New Delhi.
14. HanumanthaRao, C. H. and H. Linnemann (Eds.) (1996), Economic Reforms and Poverty Alleviation in India, Sage Publications, New Delhi.
15. Jain, a. K. (1986), Economic Planning in India, Ashish Publishing House, New Delhi.
16. Jalan, B. (1996), India's Economic Policy – Preparing for the Twenty First Century, Viking, New Delhi.
17. Joshi, V. and I. M. D. Little (1999), India: Macro Economics and Political Economy, 1964-1991, Oxford University Press, New Delhi.
18. Machiraju, H. R. (1998), Indian Financial System, Vikas Publishing House Pvt., Ltd., New Delhi.
19. Mookherjee, d. (Ed.) (1997), Indian Industry: Policies and Performance, Oxford University Press, New Delhi.
20. Narain, D. (1988), Studies on Indian Agriculture, Oxford University Press, New Delhi.
21. Parikh, K. S. (1999), India Development Report – 1999-2000, Oxford University Press, New Delhi-8.
22. Rangarajan, C. (1998), Indian Economy: Essays on Money and Finance, UBS, New Delhi.
23. Reserve Bank of India, Report on Currency and Finance (Annual)
24. Reserve Bank of India, Report on Currency and Finance, (Annual).
25. Sandesara, J. c. (1992), Industrial Policy and Planning, 1947-1991: Tendencies, Interpretations and Issues, Sage Publications, New Delhi.
26. Sen, R. K. and B. Chatterjee (2001), Indian Economy: Agenda for 21st Century (Essays in honour of Prof. P. R. Brahmananda), Deep & Deep Publications, New Delhi.
27. Subramanian, S. (Ed.) (1997), Measurement of Inequality and Poverty, Oxford UniversityPress, Calcutta.
28. Swamy, D. s. (1994), The Political Economy of Industrialization: from Self-reliance to Globalization, Sage Publications, New Delhi.
29. Thirlwal, A. P. (1997), Economic Development in the Third World, Addison-Wesley, England.
30. United Nations Development Programme (1997), Human Development Report, Oxford University Press, New Delhi.
31. World Bank (2000), India: Reducing Poverty, Accelerating Economic Development, Oxford University Press, New Delhi.

Open Elective Paper

Paper No: 2

FINANCIAL MARKETS AND INSTITUTIONS

Preamble

The positive and significant role of financial institutions in the process of growth and development has been very well recognized in the literature and indeed has become more important during the last two decades as the financial systems of different countries have become integrated in the process of globalization. India is no exception and has taken far reaching measures since 1991 in this direction. It is, therefore, essential that the student of economics should be well conversant with the theory and practice of different financial institutions and markets to understand and analyse the interconnection between the monetary forces and real forces, their developmental role and limitations in shaping and influencing the monetary and related policies both at the national and international levels.

Unit-1. Financial System and Central Bank: **(15 Periods)**

    A. The structure of the financial system –

    B. Functions of the financial sector –

    C. Functions of Central Bank –

    D. The objectives of the monetary policy-

    E. Instruments of monetary policy -

Unit-2. The Commercial Banks and NBFIs **(15 Periods)**

    A. Commercial Bank's Credit creation and its control

    B. Development banks – Investment banking and Merchant banking;

    C. Non-bank financial institutions- Measures taken to control their operations.

Unit-3. Financial Markets: **(15 Periods)**

    A. Structure of money market and capital market –

    B. Call money market, Treasury bill market,

    C. Commercial bill market, commercial paper and certificate of deposits,

    D. Government securities market– Primary and secondary market for securities;

    E. Security Exchange Board of India (SEBI)

    F. Insurance Regulatory and Development Athority (IRDA)

Unit-4. International Financial Markets: **(15 Periods)**

    A. Exchange Rates– Devaluation, and Depreciation–

    B. International Financial Flows: –

    C. International Liquidity –

D. World Bank and its affiliates –IDA and IFC.–

E. Asian Development Bank,

BASIC READING LIST

1) Bhole, L. M. (1999), Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi.

2) Bhole, L. M. (2000), Indian Financial System, Chugh Publications, Allahabad.

3) Edminster, R. O. (1986), Financial Institutions, Markets and Management, McGraw Hill, New York.

4) Goldsmith, R. W. (1969), Financial Structure and Development, Yale, London.

5) Hanson, J. A. and S. Kathuria (Eds.) (1999), India: A Financial Sector for the Twenty-first Century, Oxford University Press, New Delhi.

6) Harker, P. T. and S. A. Zenios (2000) (Ed.), Performance of Financial Institutions, CambridgeUniversity Press, Cambridge.

7) Johnson, H. J. (1993), Financial Institutions and Markets, McGraw Hill, New York.

8) Khan, M. Y. (1996), Indian Financial System, Tata McGraw Hill, New Delhi.

9) Machiraju, M. R. (1999), Indian Financial Systems, Vikas Publishing House, New Delhi.

10) Ohlson, J. A. (1987), The Theory of Financial Markets and Institution, North Holland, Amsterdam.

11) Prasad, K. N. 92001), Development of India's Financial System, Saruo& Sons, New Delhi.

12) Robinson, R. I. and D. Wrightman (1981), Financial Markets, McGraw Hill, London.

13) Smith, P. F. (1978), Money and financial Intermediation: The Theory and Structureof Financial System, Prentice Hall, Englewood-Cliffs, New Jersey.

14) Bishop, P. and D. Dixon (1992), Foreign Exchange Handbook, McGraw Hill, New York.

15) Chandra, P. (1997), Financial Markets (4th Edition), Tata McGraw Hill, New Delhi.

16) Farrell, J. L. (1997), Portfolio Management, (2nd Edition), McGraw Hill, New York.

17) Machiraju, H. R. (1997), International financial Markets in India, Wheeler Publishing, Allahabad.

18) Gupta, S. B. (1983), Monetary Economics, S. Chand & Company, New Delhi.

Practical/ Field Work

Paper No: 1

Total Marks: 100

(Report Writing = 70 Marks and

Written and Oral Examination: 30 Marks)

Teaching/Practical Workload: 4 Hours Per Week

Quantitative Techniques : Problems And Solutions- II

Unit – 1. Problems on Time Series Data **(15 Periods)**

Measurement of trend: Free hand/ Graphic Method,

Semi-Average Method, Moving – Average Method, and

Method of Least Square-fitting a straight line trend.

Unit – 2. Problems on Growth Rates: **(15 Periods)**

Growth Rates: Importance

Simple Growth Rate – with Two and Many Observations

Compound Growth Rate - with Two and Many Observations

Unit – 3. Problems on Index Numbers: **(15 Periods)**

Laspeyre's Index Number

Paasche's Index Number

Fisher's Index Number

Marshall-Edgewarth's Index Number

Dorbish-Bowley's Index Number

Walseche's Index Number

Kelly's Index Number

Unit - 4. Problems on Diagrammatic Presentation of Data: **(15 Periods)**

Line Graph: Simple, Multiple, Component, Percentage Graph:

Bar Diagram: Simple, Multiple, Component, Percentage Graph:

Pie Chart, Histogram, Frequency Polygon, Ogive Curve

Practical/ Field Work

Paper No: 2

Total Marks: 100

(Report Writing = 70 Marks and

Written and Oral Examination: 30 Marks)

Teaching/Practical Workload: 4 Hours Per Week

Application of Concept/Theory/Issues – II
(Report Based on Study Tour/ Industrial Visit/ Field Visits)

The Student shall produce the report for assessment on any Ten points of following information before the University Theory examination.

Unit 1: Application of Price and Output Determination   **(15 Periods)**

Application of Oligopoly

Application of Monopsony and

Application of Bilateral monopoly.

Issues in Marginal productivity

Unit 2: Indian Economy   **(15 Periods)**

Issues in Economic Planning

Objecitves of First Five Year Plan to Twelveth Five Year Plan

Issues in Public distribution system

Unit 3: Economic Reforms   **(15 Periods)**

Issues in Public Sector enterprises and their performance;

Benefits of Privatization and disinvestment

Issues in Industrial Sector Reforms

Issues in Financial Sector Reforms

Unit 4: Issues in Transport Sector   **(15 Periods)**

Problems in Transport Sector

Issues in Road Transport

Issues in Indian Railway

Issues in Water Transport

Issues in Air Transport

M. A. PART – II, SEMESTER- III
w.e.f. June, 2017

Hard Core Papers
Paper No: 1

PUBLIC ECONOMICS

Preamble

Role and functions of the Government in an economy have been changing with the passage of time. The term 'Public Finance' has traditionally been applied to the package of those policies and operations which involve the use of tax and expenditure measures while budgetary policy is an important part to understand the basic problems of use of resources, distribution of income, etc. There are vast array of fiscal institutions – tax systems, expenditure programmes, budgetary procedures, stabilization instruments, debt issues, levels of government, etc., which raise a spectrum of issues arising from the operation of these institutions. Further, the existence of externalities, concern for adjustment in the distribution of income and wealth, etc. require political processes for their solution in a manner, which combines individual freedom and justice. This paper combines a thorough understanding of fiscal institutions with a careful analysis of the issues which underline budgetary policies.

Unit-1: Role of Government: **(15 Periods)**

(A) Role of Government in a mixed economy; Government as an agent for economic planning and development;

(B) Private goods, public goods, and merit goods;

(C) Market failure

Unit-2: Public Choice and Public Policy   **(15 Periods)**

(A) Private and public mechanism for allocating resources; Problems for allocating resources;

(B) Problems of preference revelation and aggregation of preferences; Voting systems; Arrow impossibility theorem; An economic theory of democracy;

(C) Voluntary exchange models; Impossibility of decentralized provision of public goods, theory of club goods.

Unit-3: Public Expenditure: **(15 Periods)**

(A) Wagner's law of increasing state activities; Wiseman-Peacock hypothesis;

(B) Criteria for public investment; social cost-benefit analysis

(C) Programme budgeting and zero base budgeting.

Unit-4: Taxation and Public Debt   **(15 Periods)**

(A) Theory of incidence; Alternative concepts of incidence;

(B) Benefit and ability to pay approaches; Theory of optimal taxation; Excess burden of taxes; the problem of double taxation, LafferCurve.

(C) Federal Finance- federalism under constitution, Finance Commission, Tax sharing,

BASIC READING LIST

1)   Atkinson, A. B. and J. E. Stiglitz (1980), Lectures on Public Economics, Tata McGrawHill, New Yor

3)   Buchanan, J. M. (1970), The Public Finances, Richard D. Irwin, Homewood.

4)   Goode, R. (1986), Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.

5)   Houghton, J. M. (1970), The Public Finance: Selected Readings, Penguin, Harmondsworth.

6)   Jha, R. (1998), Modern Public Economics, Routledge, London.

7)   Menutt, P. (1996), The Economics of Public Choice, Edward Elgar, U. K.

8)   Musgrave, R. A. (1959), The Theory of Public Finance, McGraw Hill, Kogakhusa, Tokyo.

9)   Musgrave, R. A. and P. B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.

10)   Shoup, C. S. (1970), Public Finance, Aldine, Chicago.

11)   Shome, P. (Ed.) (1970), Tax Policy: Handbook, Tax Division, Fiscal Affairs Department, International Monetary Fund, Washington D. C.

12)   Cornes, R. and T. Sandler (1986), The Theory of Externalities, Public Goods and Club Goods, CambridgeUniversity Press, Cambridge.

13)   Duff, L. (1997), Government and Market, Orient Longman, New Delhi.

14)   Herber, B. P. (1967), Modern Public Finance, Richard D. Irwin, Homewood.

15)   Spulber, N. (1998), Redefining the State, CambridgeUniversity Press, Cambridge.

16)   Buchanan, J. M. (1968), The Demand and Supply of Public Goods, Rand McNally, Chicago.

17)   Mueller, D. C. (1979), Public Choice, Cambridge.

18)   Spulber, N. (1998), Redefining the State, CambridgeUniversity Press, Cambridge.

19)   Stiglitz, J. E. (1986), Economics of Public Sector, Norton, New York.

20)   Dorfman, R. (Ed.) (1970), Measuring the Benefits of Government Investment, Brookings Institution, Washington.

21)   Friedman, A. (1986), Welfare Economics and Social Choice Theory, Martins Nijhoff, Boston.

22)   Glennester, H. and J. Hills (1998), The State of Welfare: The economic and Social Spending Oxford University Press, London.

24)   Peacock, A. and D. J. Robertson (Eds.) (1963), Public Expenditure: Appraisal and Control, Oliver and Boyd, Edinburgh.

25)   Phyrr, P. (1970), Zero Base Budgeting: A Practical Management Tool for Evaluating Expenses, John Wiley, New York.

26)   Premchand, A. (1966), Control of Public Expenditure in India, Allied Publishers, New Delhi.

27)   Sahni, B. S. (Ed.) (1972), Public Expenditure Analysis : Selected Readings, RotherdamUniversity Press.

28)   Bird, R. and O. Oldman (1967), Readings on Taxation in Developing Countries, the JohnHopkinsUniversity Press, Baltimore.

29)   Cutt, J. (1969), Taxation and Economic Development in India, Frederick A Praegar Publishers, New York.

30)   Kaldor, N. (1955), An Expenditure Tax, George Allen and Unwin, London.

32)   Barman, K. (1986), Public Debt Management in India, Uppal Publishing House, New Delhi.

33)   Buchanan, J. M. (1958), Principles of Public Debt, A Defence and Restatement, Richard D. Irwin, Homewood.

34)   Ferguson, J. M. (Ed.) (1964), Public Debt and Future Generations, North CarolinaUniversity Press, Chapel Hill.

Hard Core Papers

Paper No: 2

MACRO ECONOMIC ANALYSIS

Preamble

Macroeconomics or aggregative economics analyses and establishes the functional relationship between the large aggregates. The aggregate analysis has assumed such a great significance in recent times that a prior understanding of macroeconomic theoretical structure is considered essential for the proper comprehension of the different issues and policies. Macroeconomics now is not only a scientific method of analysis; but also a body of empirical economic knowledge. The paper entitled "Macro Economic Analysis" equips the students at the postgraduate level to understand systemic facts and latest theoretical developments for empirical analysis.

Unit-1: National Income and Accounts: **(15 Periods)**

(A) Circular Flow of Income in two – three and four sector economy;

(B) Different forms of national income accounting – social accounting, input-output accounting,

(C) Flow of funds accounting and balance of payments accounting.

Unit-2: Neo-classical, Keynesian synthesis and New Classical Macro economics

(15 Periods)

(A) Neo-classical and Keynesian views on interest; The IS-LM model;

(B) Extension of IS-LM model with government sector; Relative effectiveness of monetary and fiscal policies;.

(C) Extension of IS-LM models with labour market and flexible prices

Unit-3: Post-Keynesian Demand for Money: **(15 Periods)**

(A) Post-Keynesian approaches to demand for money – Patinkin and the Real Balance Effect,

(B) Approaches to Baumol and Tobin;;

(C) Friedman and the modern quantity theory

Unit-4: Theory of Inflation and Business Cycles: **(15 Periods)**

(A) Classical, Keynesian and Monetarist approaches to inflation; Structuralist theory of inflation; Philips curve analysis – Short run and long run Phillips curve;

(B) Adaptive expectations and rational expectations; Policies to control inflation;

(C) Theories of Samuelson and Hicks, Goodwin's model; Control of business cycles

BASIC READING LIST

1) Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.

2) Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 Vols.), OxfordUniversity Press, London.

3) Branson, W. a. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New Y

4) Dornbusch, R. and F. Stanley (1997), Macroeconomics, McGraw Hill, Inc., New York.

5) Hall, R. E. and J. B. Taylor (1986), Macroeconomics, W. W. Norton, New York.

6) Heijdra, B. J. and V. Frederick (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.

7) Jha, R. (1991), contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.

8) Romer, D. L. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New York.

9) Scarfe, B. L. (1977), Cycles, Growth and Inflation, McGraw Hill, New York.

10) Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.

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

12) Powelson, J. P. (1960), National Income And Flow of Funds Analysis, McGraw Hill, New York.

13) Rao, V. K. R. V. (1983), India's National Income: 1950 to 1980, Sage Publications, New   Delhi.

14) Ruggles, R. and N. Ruggles (1956), National Income Accounts and Income Analysis, McGraw Hill, New York.

15) United Nations (1974), Year Book of National Account Statistics.

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

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

18) Mueller, M. G. (1966), Readings in Macroeconomics, Holt Rinehart and Winston, New York.

19) Gordon, R. and S. G. Harris (1998), Macroeconomics, Addison Wesley.

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

21) Levacic, R. and A. Rebman (1986), Macroeconomics: An Introduction to Keynesian and Neo-classical Controversies, Macmillan, London.

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

23) Rakshit, M. (1998), Studies in the Macroeconomics of Developing Countries, Oxford University Press, New Delhi.

24) Jha, R. (1999), Contemporary Macroeconomic Theory and Policy, New Age International (P) Ltd., New Delhi.

25) Patinkin, D. (1965), Money, Interest and Prices, Harper and Row, New York.

26) Gordon, R. and S. G. Harris (1998), Macroeconomics, Addison Wesley, Massachusetts.

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

28) Frisch, H. (1983), Theories of Inflation, CambridgeUniversity Press, Cambridge.

29) Hagger, A. J. (1977), Inflation: Theory and Policy, Macmillan, London.

30) Hudson, J. (1982), Inflation: A Theoretical Survey and Synthesis, George Allen and Unwin, London.

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

Soft Core/ Elective Paper
Paper No: 1

INTRODUCTION TO RESEARCH METHODS

Objectives of the Course:
   (i) To introduce the students to the logic of social research and the associated
        processes; and
   (ii) To build capacity to carry out research independently.

Unit 1: Introduction and Context: (12 Periods)

What is Social Research? Definition, Meaning and its History; Importance of Social Research: Knowledge Economy and Knowledge Society; Research as an Empowering Profession.

Unit 2: Research Process and Design: (12 Periods)

Formulating Research Topic; Use of Concepts, Variables, and Hypotheses; Setting Research Objectives / Questions, Reviewing Relevant Literature. Research Design: Meaning and Types of Research Designs; Descriptive, Analytical, Explorative, Basic and Applied Research Designs;

Unit 3: Techniques of Sampling: (12 Periods)

Meaning and Types of Sampling; Random, Stratified, Quota, Systematic, Cluster and Judgment Sampling Procedures.

Unit 4: Collection of Data: (12 Periods)

Collection of Primary Data: Questionnaires, Interview Schedules, Observation Method, Case Studies, Content Analysis and Survey Methods. Collection of Secondary Data: Historical Documents, Archival Material, Published Sources, Journals, Internet Sources, Census, NSS and Statistical Reports.

Unit 5: Research Writing: (12 Periods)

Writing Research Proposal and Research Report, One Case Study of a Research Proposal.

References:

1. Baily K.D, 1982, Mothods of Social Research Free press, New York.

2. Bajpai S.R. 1969. Social Survey and Research. Kanpur: KitabGhar.

3. Barnes,John A, 1979,Who Should Know What ? Social Science, Privacy and Ethics, Harmondsworth, Penguin.

4. Bleicher M. 1988.The Hermeneutic Inagination, London. Routlcdege and Kegan Paul (Introduction onlu)

5. Bose.Pradip Kumar,1995: Research Methodology, New Delhi,ICSSR.

6. Bryman, Alan,1988, Quality and Quantity in Social Research, London: Unwin Hyman.

7. Fayerabad,Paul,1975, Against Method: Outline of an Anarchistic Theory of Knowledge, London, Humanities Press.

8. Goode, J. and Hatt P.J., Mcthods in Social Research,New York McGraw Hill.

9. Hughes, Jon, 1987, The Philosophy of Social Research, London, Longmon. Indian Journal of Social work 1985, Spccial issue of Research Mothodology Irvine. J.I. Miles and J. Evans (eds) 1979. Demystifying Social Statistics. London, Pluto Press.

10. Mukherjce, P.N. (eds),2000, Methodology in Social Research. Delimmas and perspectives, New Delhi, Sage (Introduction).

11. Popper K., 1999, The Logic of Scientific Discovery, London, Routledge.

12. Puch, Keith, 1986, The Introduction to Social Research,London,Sage.

13. Srinivas, M.N. And A.M Shah 1979, Field Worker and the Filed, New Delhi.Oxford.

14. Young Papuline V. 1946. Scientific, Social Survey and Research. New York. Prentice Hall.

Soft Core/ Elective Paper

Paper No: 2

TAX AND TAX CONSULTANCY

Unit 1: Meaning, Incidence and Principles of Taxation: **(12 Periods)**

    A.   Tax: Concept and Features

    B.   Impact, Incidence and Shifting of Tax

    C.   Benefit Principle

    D.   Ability to Pay Principle

Unit 2: Types of Taxes: **(12 Periods)**

    A.   Proportional, Progressive and Regressive Taxes

    B.   Direct Taxes in India

    C.   Indirect Taxes in India

    D.   Tax Administrative in India

Unit 3: Budgetary Procedure and Finance Bill: **(12 Periods)**

    A.   Meaning of Budget

    B.   Procedure of Budget

    C.   Content of Budget (Part A and Part B)

    D.   Presentation and Discussion

Unit 4: Tax Consultancy Service: **(12 Periods)**

    A.   Meaning –Nature and Scope

    B.   Documentary Evidence –Sale, Purchase Register (Sales Bills), Cash Book , Ledger

    C.   Return Forms – Filling of Return, E- Filing

Unit 5: Tax Consultancy – Income Tax in India   **(12 Periods)**

    A.   Income Tax, Concept- Source of Income

    B.   Income from Salary – Income from House Property

    C.   Capital Gain, Gift, Income from other Sources

    D.   Professional and Business Gains, Standard Deduction and other Concession

Basic Reading List:

1. L.L.M in Tax Law –School of law Queen Marry University of London.
2. Chartered Tax Advisers –Inside Carrer.
3. International Tax Leiden - Center Leiden ITC leiden.
4. Tax Reference Book for Practitioners &Professionals ,Top Picks , by William Perez .
5. Getting Started in Tax Consultancy by Gray .W. Cater CPA
6. Washington State tax Consultancy
7. Federal Tax , Duke University ,school of Law
8. A Student Guide to Income tax , service Tax /vat ,by V.K .Singhania , jammu.
9. Tax Research –Federal Georgentown law.
10. Tax Faculty Referral Scheme ICAEW.
11. Business Valuation Consultancy Reference book.
12. Tax Research Service – Tax Consultancy South Africa.
13. Principle of Model Tax Convention and International Taxation.
14. Pwc Tax Pocket 2013.
15. Massachusetts Enacts Sales Tax on computer service
16. Fundamental of private pensions , press oxford University.
17. Tax preception and compliance tax survey , A Tool of Tax Reform,(2011) , united State of America.

Open Elective Paper

Paper No: 1

HUMAN DEVELOPMENT

Preamble:
  In most of the corporate bodies, the training and extension activities are integral part of the business enterprises. Most of the post-graduate students find an employment opportunity in such corporate bodies. With this intension our students should learn the bases of the HRD.

Unit-1.Human Capital: **(15 Periods)**

  A)   Human capital – innate and acquired, Human capital formation – social, economic and political determinants

  (B)   Distinction between Human Resource Development (HRD) and Human Development (HD)

Unit-2.Human Development and Capability Approach: **(15 Periods)**

  (A)   Capabilities and freedoms, Criteria for selecting capabilities

  (B)   Introduction to other attempts, Critique of the Capability Approach

Unit-3.Comparing the Approaches and Components of Human Security

                (15 Periods)

  (A)   Commodity-based system and utility approach, Quality of Life,

  (B)   Economic security, Food security, Health security

  (C)   Environmental security, Personal security, Community security

      Political security

Unit-4: Measurement of Human Development: **(15 Periods)**

  (A)   Need for indices –Earlier indices – Physical Quality of Life Index (PQLI), Disability Adjusted Life Years (DALYs),

  (B)   Emergence of Human Development Index

    (i)   Method of computing HDI

    (ii)   Critique of HDI

  (C)   Other indices :

    (i)   Human Poverty Index (HPI I / HPI II)

    (ii)   Gender-related Development Index (GDI)

    (iii)   Gender Empowerment Measure (GEM)

BASIC READING LIST:

1) Aghion, P., E. Caroli, and C. Garcia-Penalosa, 1999, 'Inequality and Economic Growth:The Perspective of the New Growth Theories', Journal of Economic Literature, 37 (3).
2) Ahmad, E., J., Dreze, J. Hills and A. Sen (eds.), 1991, Social Security in Developing Countries, Clarendon Press for Wider, Oxford.
3) Ahn, T. K., Ostrom, E., (eds.), 2003, Foundations of Social Capital, Edward Elgar Publishing Ltd., Cheltenham, U. K.
4) Aksah, M. M., 2000, 'Reights Based Approach to Development and Right to Land', Background Paper for HDR, 2000, UNDP, New York.
5) Alderman, Harold, 2002, Gender Dimensions of Safety Nets, The World Bank, WashingtonD.C.,http:/w.w.w.worldbank.org/wbi/socialsafetynets/courses/dc 2002/index.html.
6) Alesina, Alberto, and Roberto Perotti, 1994, 'The Political Economy of Growth: A Critical Survey of the Recent Literature', World Bank Economic Review, 9 (3).
7) Anand S. and S.M.R., Kanbur, 1993, 'Inequality and Development: A Critique'Journal of Development Economics, 41 (l).
8) Bardhan, Pranab, 1993, 'Symposium on Democracy and development', Journal of Economic Perspectives 7(9).
9) Chenery, H. and M. Ahluwalia, 1974, Redistribution with Growth, OxfordUniversity Press, London.
10) Chenery, H. and T. N. Srinivasan (eds.), 1988-1989), The Handbook of Development Economics.
11) Dasgupta, Partha and Martin Weale, 1992, 'On Measuring the Quality of Life', World Development 20(1).
12) DasguptaSukti, 2002, Organizing for Socio-Economic Security in India, International Labour Organisation, Geneva.
13) Evans, P., 1996, 'Government Action, Social Capital and Development: Reviewing the Evidence on Synergy', World Development, 24(6).
14) Field, J., 2004, Social Capital, Routledge, London and New York.
15) Fukuyama Francis, 1995, Social Capital and the Global Economy', Foreign Affairs 74(5).
16) Grinspun, A. (ed.), 2001, Choices for the Poor, Lessons from National Poverty Strategies, UNDP, New York.
17) Hooghe, M., D. Stolle (eds.), 2003, Generating Social Capital: Civil Society and Institutions in Comparative Perspective, Palgrave, New York.
18) Huntington, Samuel, 1987, 'The Goals of Development', in Myron Weiner and Samuel P. Huntington, (eds.), Understanding Political Development, Little Brown and Com., Boston.
19) Kakwani, N., 1993, 'Performance in Living Standards: An International Comparison', Journal of Development Economics", 41(2).
20) Larrain, J., 1989, Theories of Development: Capitalism, Colonialism and Dependency, Polity Press, Cambridge.
21) Lewin, W. Arthur, 1955, The Theory of Economic Growth, Irwin, Homewood, IL.
22) Nussbaum Martha and AmartyaSen (eds.), 1991, The Quality of Life, OxfordUniversity Press, Oxford.
23) Portes, Alejandro and Patricia Landolt, 1996, 'The Downside of Social Capital', TheAmerican Prospect, 7 (26).
24) Ranis, Gustav, Frances Stewart and Alejandro Ramirez, 2000, 'Economic Growth and Human Development', in Sakiko Fukuda-Parr and A. K. Shiva Kumar (eds.), Readings in Human Development: Concepts, Measures and Policies for a Development Paradigm, OxfordUniversity Press, New Delhi.
25) Ray, Debraj, 1998, Development Economics, PrincetonUniversity Press, Princeton.
26) Sen, Amartya, 1985, 'Well-being, Agency and Freedom: The Dewey Lectures, 1984',Journalof Philosophy, 82 (4).
27) Sen, Amartya, 1988, 'Capability and Well-being, WIDER Conference paper.
28) Sen, Amartya, 1988, 'Freedom of Choice: Concept and Content', European Economic Review, 32
29) Streeten, Paul, ShahidJavedBurki, Mahbubul-Haq, Norman Hicks, and Frances Stewart, 1981, First Things First: Meeting Basic Human Needs in Developing Countries, Oxford University Press, New York.
30) Streeten, Paul, 2003, 'Shifting Fashions in Development Dialogue', in Sakiko Fukuda-Parr and A. K. Shiva, Kumar (eds.), Readings in Human Development:

Open Elective Paper

Paper No: 2

ECONOMICS OF TRANSPORT

Preamble

 Transport and communication is known as the backbone of modern industrial infrastructure. The efficiency, spread and its access to productive agents of such facilities determines the competitiveness of the industrial sector. The transport modes like road, water, air and rail and their development have played an immense role in the economic development. Every mode of transport has its merits and limits which calls for coordinate development of these modes in future.

Unit1: Introduction of Transport   **(12 Periods)**

 A. Meaning of transport–

 B. Classification of transportation–

 C. Functions of transport–

Unit 2: Road Transport: **(12 Periods)**

 A. Road Transport: Nature and significance –

 B. Private and public transport system-

 C. Road development in India –

 D. Rural and Uraban Transport -

 E. MSRTC

Unit 3: Indian Railway: **(12 Periods)**

 A. Growth of Indian Railway during Post Independence period -

 B. Theories of Railway Rates and Fares –

 C. Classification of goods –

 D. Railway Budgets (Recent two)-

Unit 4: Water Transport :   **(12 Periods)**

 A. Water Transport: Scope and significance –

 B. Growth of water transport in India –

 C. Inland and ocean transport -

 D. Problems of water transport

Unit 5: Air Transport: **(12 Periods)**

 A. Nature and Significance of Air Transport–

 B. Air Transport: Elements of Air Transport –

 C. Civil Aviation in India:

BASIC READING LIST

1. Aboncher Allan (1976), Transportation Economics and Public Policy with Urban Extension, Wiley Inter Science Publishing, New York.

2. Denis Munby (Ed.), Transport – Selected Reading s- Penguin Books.

3. Innon and Toreifel (Ed.) (1967), Developments in Transport Theory, Academic Press, London.

4. Johnson, Economics of Indian Rail Transport.

5. Kosler, H. M., The Economics and Control of Road Rail Competition.

6. Locklin, D. P.: Economics of Transport

7. Nanjundappa, D. H. (1973), Transport Planning and Finance, KarnatakaUniversity.

8. Nawab, K. W. (1967), Economic Development of Indian Air Transport, National Publishing House.

9. Pegrum, D. F. (1968), Transportation Economics and Public Policy, Irwin Series in Economics.

10. Prest, A. R., Transportation Economics in Developing Countries

11. R. N. Kshirsagar, Vahatuk: SiddhanthVaVikas, Maharashtra VidyapeethGranthNirmitiMandal, Nagpur.

12. S. K. Choudhary (1967) Lectures on Transport, Lyall Book Depot.

13. Savage, C. I.(1970), An Economic History of Transport, HutchinsonUniversity Library.

14. Shankar KeshavModak, AAdhunikParivahanacheAArthshastra, Maharashtra Vidyapeeth Granth Nirmiti Mandal, Nagpur.

15. Sharp, C. H. (1973), Transport Economics, Macmillan.

16. Shrivastan, S. K., Economics of Transport

17. Tripathy, P. C. (1972), Rural Transport and Economic Development, S. Chand& Sons.

Practical/ Field Work

Paper No: 1

Total Marks: 100

(Practical Work Report = 70 Marks and

Written and Oral Examination: 30 Marks)

Teaching/Practical Workload: 4 Hours Per Week

(Practical work Based on Secondary Source of Data by using MS Excel Software)

The Student shall produce the report for assessment on following information by using **MS Excel Software** before the University Theory examination.

Unit 1: Application of MS Excel Software: (15 Periods)

The Student shall apply statistical techniques for Economic Parameters by using following data base with the help of **MS Excel Software**. In the Ms Excel Software, student shall use the Excel Functions, Excel Sheets, Excel Charts and Data Transfer from Excel.

Unit 2: Data Base – I : (15 Periods)

The Student shall use any 2/3 sources of following secondary data base for report.

1. Economic Survery of India,

2. Economics Survey of Maharashtra,

3. National Sample Survey Organistion (NSSO)

Unit 3: Data Base – II : (15 Periods)

The Student shall use any 2/3 sources of following secondary data base for the report.

1. Population Census,

2. District Statistical Report,

3. Various Report of Institutions, Banks, Industry, etc.

Unit 4: Application of Statistical Techniques: (15 Periods)

The Student shall apply following statistical techniques for Economic Parameters of **Indian Economy** such as Agricultueral Sector, Industrial Sector, and Service Sector etc. by using secondary data base from above metioned data sources for the report with the help of MS Excel Software. Discriptive Statitics, Correlation Analysis, Regression Analysis, Growth Rates, Index Numbers, Time Series Data and Graphical Presentation for different type of data.

Practical/ Field Work

Paper No: 2

Total Marks: 100

(Practical Work Report = 70 Marks and

Written and Oral Examination: 30 Marks)

Teaching/Practical Workload: 4 Hours Per Week

SPSS Base **Practicals**

(for Primary and Secondary Data)

Unit 1: Data Entry in SPSS   **(15 Periods)**

1. Define Variable

2. Sort Variable and Cases

3. Validation of data

4. Transpose data

Unit 2: Coding, Recoding and Compute Variables   **(15 Periods)**

1. Coding the variables

2. Recoding the variables

3. Codebook Report

4. Compute Variable

Unit 3: Discriptive Statistics, Frequency and Crosstabs   **(15 Periods)**

1. Discriptive Statisitcs

2. Frequency Distribution

3. Crosstabulation

4. Graphical Presentation

Unit 4: Correlation, Regression and Output Files   **(15 Periods)**

1. Linear Correlation

2. Linear Regression

3. Time Series Data

4. Output files

5. Sentex

M. A. PART – II, SEMESTER- IV

Hard Core Papers

Paper No: 1

MONETARY ECONOMICS

Preamble

This paper analyses the significant role of 'Money' in the economy. It provides essential and thorough knowledge to the economics students relating to the theoretical aspects of money. It covers various approaches towards evolution of money, demand for money, supply of money, and rate of interest, inflation, agencies which creates and supplies money and operates monetary policy. The paper also deals with Keynesian and post-Keynesian economics, which is a most essential part of the monetary economics. Since reforms introduced in financial sector, many new concepts have emerged in this sector. For the students of economics it is essential to understand and analyses these new concepts as well as monetary forces and real forces, their developmental role and limitations in shaping and influencing the monetary and related policies both at the national and international level.

Unit-1.Evolution of Money and Supply of Money   (15 Periods)

(A)   Stock& Flow concept of money – Functions of Money – Liquid and illiquid asset – Money and capital. Constituents –

(B)   Behaviourial model of money supply determination, demand determined supply of money; Measurement – Base Money and Reserve Money – High power money – Money multiplier –

(C)   Monetary targeting – Inflation targeting – Interest rate targeting – Factors affecting money supply.

Unit-2. Demand for money: **(15 Periods)**

(A)   Approaches – Cash transaction and cash balance –

(B)   Liquidity preference

(C)   Milton Friedman and Don Patinkin's contribution.

Unit-3. Classical and Keynesian income determination theories and Rate of Interest   (15 Periods)

(A)   Consumption function – Multiplier – Acceleration – super multiplier – Investment function.

(B)   Rate of interest andmacro economic equilibrium and employment equilibrium – IS-LM Model

(C)   Determinants of rate of interest – Interest rate modeling – Term structure of Interest rates

Unit-4. Monetary and non-monetary theories of inflation and Stabilization Policy

(15 Periods)

(A)   Phases of trade cycle

(B)   Theories of trade cycle: Hawtrey, Hayek, Schumpeter, and Keynes – Anti-cyclical policy. Objectives and limitations –

(C)   Stabilization policy: objectives and limitations.

BASIC READING LIST

1)   Keynes, J. M., General Theory of Employment, Interest and Money.

2)   A. E. A., Readings in Monetary Theory

3)   Halm, G. N., Monetary Economics

4)   Einzing, P., Monetary Policy: Ends & Means

5)   Newlyn, W. E., theory of Money

6)   Chandler, L. V., Economics of Money and Banking.

7)   Scammel, W. M., International Monetary Policy

8)   Sen, S. N., central Banking in Underdeveloped Money Markets

9)   H. Johnson, Essays in Monetary Theory

10)   Don Patinkin, Money, Interest and Prices

11)   Shaw, E. S., Money, Income and Monetary Policy

12)   A. C. L. Day, An Outline of Monetary Economics

13)   M. Friedman, Essay on Money

14)   M. L. Sheth, Monetary Economics

15)   Ghosh, B. N. &Ghosh Rama, Monetary Economics

16)   Harris, L., Monetary Theory

17)   J. D. Von Pischke, Finance at the Frontier: Debt, Capacity and Role of Credit in Private Economy

18)   RBI Reports

19)   World Bank Reports

20)   IMF Reports

21)   Friedman M, Essays on Money

22)   Bhole, L. M., Financial Institutions and Markets: Structure, Growth and Innovation

Hard Core Papers

Paper No: 2

ECONOMICS OF GROWTH AND DEVELOPMENT

Preamble

This paper deals with the theories of growth and development, social and institutional aspects of development, importance of agriculture, and the rationale and pattern of industrialization in developing countries. The other important issues in the context of development such as infrastructure- linkages, role of international trade, importance of domestic macroeconomic policies, investment criteria, and relevance of planning have been included in the paper.)

Unit-1. Economic Growth: **(15 Periods)**

A)   Economic growth and development , Factors affecting economic growth

B)   Growth Model- Harrod and Domar model, Neo-classical growth models – Solow Capital controversy, optimal savings and Ramsay's rule; golden rule of accumulation,

C)   Technological progress – embodied and disembodied technical progress;

Unit-2. Theories of Development: **(15 Periods)**

A)   Classical theory of development – contributions of Ricardo, Karl Marx – theory of social change, surplus value and profit.

B)   Balanced growth, unbalanced growth, critical minimum effort thesis, low-income equilibrium trap;

C)   Vicious circle of poverty, circular causation,

Unit-3.Social and Sectoral Aspects of Development: **(15 Periods)**

A)   Choice of techniques and appropriate technology and employment;

B)   Terms of trade between agriculture and industry; Measuring development and development gap – Kuznet curve -

C)   Human development index and other indices of development and quality of life

D)   Theory of demographic transition

Unit-4. Macroeconomic Policies and Development: **(15 Periods)**

A)   Role of monetary and fiscal policies in developing countries –

B)   Role of fiscal policiesin developing countries

C)   Inclusive Growth Washington, Congensus, Decentralization.

BASIC READINGS

1) Adelman, I. (1961), Theories of Economic Growth and Development, StanfordUniversity Press, Stanford.

2) Behrman, S. and T. N. Srinivasan (1995), Handbook of Development Economics, Vol. 3, Elsevier, Amsterdam.

3) Brown, M. (1966), On the Theory and Measurement of Technical Change, CambridgeUniversity Press, Cambridge, Mass.

4) Chenery, H. B. et. Al. (Eds.) (1974), Redistribution with Growth, Oxford University Press, Oxford.

5) Chenery, H. and t. N. Srinivasan (Eds.) (1989), Handbook of Development Economics, vols. 1 & 2, Elsevier, Amsterdam.

6) Dasgupta, P. (1993), An Enquiry into Well-being and Destitution, Clarendon Press, Oxford.

7) Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.

8) Gillis, M., D. H. Perkins, M. Romer and D. r. Snodgrass (1992), Economics of Development, (3rd Edition), W. w. Norton, New York.

9) Gimmell, N. (1987), Surveys in Development Economics, Blackwell, Oxford.

10) Higgins, B. (1959), Economic Development, W. w. Norton, New York.

11) Hogendorn, J. (1996), Economic Development, Addison, Wesley, New York.

12) Kahkonon, S. and M. Olson (2000), A New Institutional Approach to Economic Development, Vistaar.

13) Kindleberger, C. P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York.

14) Meier,G.M.(1995),LeadingIssuesinEconomicDevelopment, (6th Edition), OxfordUniversity Press, New Delhi.

15) Myint, Hla (1965), The Economics of Underdeveloped Countries, Preager, New York.

16) Myint, H. (1971), Economic Theory and Underdeveloped Countries, OxfordUniversity Press, New York.

17) Todaro, M. P. (1996), (6th Edition), Economic Development, Longman, London.

18) Thirwal, A. P. (1999), (6th Edition), Growth and Development, Macmillan, U. K.

19) Barrell, R., G. Mason and M. O. Mahoney (2000), Productivity, Innovation and Economic Performance, CambridgeUniversity Press, Cambridge.

20) Barrow, R. and X. Sela-I, Martin, Economic Growth, McGraw Hill, New York.

21) Chakravarti, S. (1982), Alternative approaches to the Theory of Economic Growth, Oxford University Press, New Delhi.

22) Hayami, Y. (1997), Development Economics, OxfordUniversity Press, New York.

23) Meadows, D. H. et. al. (1972), The Limits to Growth, Universe Books, New York.'

24) Sen, A. K. (Ed.) (1990), Growth Economics, Penguin, Harmondsworth.

25) Solow, R. M. (2000), Growth Theory: An Exposition, OxfordUniversityPress, Oxford.

26) Taylor, L. 91979), Macro Models for Developing Countries, McGraw Hill, New York.

27) Therberge, J. D. et. al. (1968), Economics of Trade and Development, John Wiley, New York.

28) Dasgupta, P. (1993), An Enquiry into Well-being and Destitution, Clarendon Press, Oxford.

29) Hirsch, A. O. (1958), The Strategy of Economics Development, YaleUniversity Press, New York.

Hard Core Papers
Paper No: 3

MATHEMATICAL ECONOMICS

Unit 1: Theory of Consumer Behaviour: **(10 Periods)**

A. Demand function,ordinal utility maximizition, slutsky equation, income substitution and price effects.

B. Concept of elasticity and it's applications.

C. Additive utility function,indirect utility function, consumer's surplus,linear expenditure system.

Unit 2: Theory of Production: **(10 Periods)**

A. Homogenous and Non-Homogenous production function,

B. Short and long run production function,

C. Cob-dauglas production function and it'sproperties.

Unit 3: Price and Output Determination: **(10 Periods)**

A. Perfect Competition, Monopoly,

B. Monopolistic, Monopsony,

C. Oligopoly, Duopoly,

D. General Equilibrium System of Walrasian Equilibrium Conditions.

Unit 4: Theory of Income Determinations: **(10 Periods)**

A. Consumption function,

B. static and dynamic multiplier,

C. determination of investments, accelerator principle.

Unit 5: Game Theory and Linear Programming: **(10 Periods)**

A. Two persons zero sum game, pay-off matrix,

B. Maximum and minimax strategies

C. Linear programming, Graphical and Simplex Method, Applications in Economics

Unit 6: Matrix: **(10 Periods)**

A. Meaning of Matrix

B. Types of Matrix

C. Algebra of Matrices

D. Determinats of Matrix

BASIC READING LIST

1) Abel, A.B.S., Bernanke and B. Menabb (1998), Macroeconomics, Addison Wesley, Massachusetts.

2) Allen, R.G.D. (1974), Mathematical Analysis for Economics, McMillian Press and ELBS, London.

3) Barro, R.J. and H. Grossman (1976), Money, Employment and Inflation, OxfordUniversity Press, Oxford.

4) Chiang, A. C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.

5) Chung, J. W. (1993), Utility and Production: Theory and Applications, Basil Blackwell, London.

6) Ferguson, C. E. (1976), Neo-classical Theory of Production and Distribution.

7) Hadley, G. (1962(), Linear Programming, Addison Wesley Publishing Co., Massachusetts.

8) Hiller, F.S. and G. J. Lieberman (1985), Operations Research, C.B.S., New Delhi.

9) Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.

10) Jones, H.G. (1976), An Introduction to the Modern Theory of Economic Growth, McGraw Hill, Kogakusha Tokyo.

11) Kothari, C. R. (1992), An Introduction to Operations Research, Vikas Publishing House, New Delhi.

12) Kuhn Harold W. (ed) (1997), Classics in Game Theory, Princeton, University Press, Princeton.

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

14) Mustafi, C. K. (1992), Operations Research : Methods and Practice, Wiley Eastern, New Delhi.

15) Nash, I.E. (1996), Essays on Game Theory, Cheltenham, U.K.

Soft Core / Elective Paper

Paper No: 1

PRINCIPLES & PRACTICE OF CO-OPERATION

Unit 1:Introduction :   **(12 Periods)**

    B. Meaning of co-operation,

    C. Role of Cooperation in a dynamic competitive economy

    D. Evolution of principles and values of cooperation

Unit 2: Development of Co-operative Movement :   **(12 Periods)**

    A. Review of Development of cooperative movement in the world

    B. Development of cooperative movement in India

    C. Development of cooperative movement in Maharashtra

Unit 3:Co –operative Credit Structure in India :   **(12 Periods)**

    A. Structure of Co-operative credit supply in India

    B. Progress and problems of Primary Agricultural Credit Co-operative Societies

    C. Progress and problems of Primary District Central Co-operative Banks

    D. Progress and problems of State Co-operative Banks

    E. Progress and problems of Urban Co-operative Banks

    F. Restructuring of Co-operative Credit – Vaidyanathan Committee Report

    G. Recommendations of ShivajiraoPatil Committee

Unit 4:Non creditCo-operatives Organization, progress & problems of the

following non – credit Co-operatives :   **(12 Periods)**

    A. Processing Co – operatives

    B. Agriculture Co – operative marketing Societies

    C. Consumer's Co – operatives

    D. Housing Co- operatives

    E. Labour Co – operatives

Unit 5: Co-operation & Planning :   **(12 Periods)**

    A. Role of Co- operative movement in the planning process.

    B. Professionalization of Co-operative management.

    C. Co-operative Governance in Co-operatives

    D. Challenges of Globalization before Co-operative movement in India

Basic Reading List :

1. Bedi R.D. Theory, History and Practice of Co – operation with reference to co – operation in foreign countries.

2. Matur B.S. Co – operation in India, SahityaBhavan Agra. (Latest edition)

3. Hejela T.N. Principles, Problems & Practice of co operationShivalalaAgarwal Publication, Agra 1985.

4. NABARD – Staststical Statement Relating to the co operative movement in India Part I & II.

5. R. Salvaraju, Vikas Publication House, New Delhi (2000)

6. Raikhelkar – Dange, Co operation : Principles &Practive, Mehta Publication House, Pune (Marathi).

7. ShahaRoopa – Damji B. H., Cooperation – Principles and Movement, PhadkePrakashan, Kolhapur.(Marathi)

8. Kamat G.S. Co operation : Principles, Practice & Management, Maharashtra University Book Publication,Nagpur (Marathi)

9. Maharashtra Co operative, Maharashtra State co operative Federation – Pune.

Soft Core / Elective Paper

Paper No: 2

ECONOMICS OF LABOUR

Unit 1: Labour Market :   **(15 Periods)**

A. Nature and Characteristics of labour markets in developing economies like India,

B. Paradigms of labour market, classical, neo-classical and dualistic,

C. Analysis of Demand and Supply forces, Demand for labour relating to size and pattern of investment,

D. Choice of technology and government labour policies, orientation, supply of labour in relation to growth of labour force, Labour market Policies.

Unit 2: Wage Determination - I :   **(15 Periods)**

A. Theory and Practice : Various Classical, neo-classical and

B. Bargaining theories of wage determination,

C. Various concepts of wages-fair, living and minimum,

D. Problems of implementation of minimum wages.

Unit 3: Wage Determination - II :   **(15 Periods)**

A. Wage determination by Sectors, Urban and Rural,

B. Organized wage and non-wage components of labour remuneration,

C. Wage and Inflation, productivity and Wage relationship,

D. Labour productivity and wage relationship.

Unit 4: Industrial Relations and Trade Unions :   **(15 Periods)**

A. Growth of Industrialization and emergence of unionism,

B. Theories of Labour Movement, Growth, Structure and pattern of trade unionism in India,

C. Determinants of Industrial Disputes, Steps to achieve industrial peace, Methods of Settlement of Industrial disputes,

D. Collective bargaining, conciliation, arbitration, labour participation in management,

E. Labour Welfare Practices in India.

Basic Reading List :

1.   Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, Delhi.

2.   Andrews, P. and T. Wilson, Eds. (1951), Oxford Studies in the Price Mechanics, Oxfort University Press, London.

3.   Bagchi, A. and M. Banerjee, Eds. (1979), Change and Choice in Indian Industry, Bagchi Publications, Calcutta.

4.   Bain, Joe (1967), Industrial Organization, 2e, John Wilety, New York.

5.   Barthwal, R. (1984), Industrial Economics, 2e, Willey Eastern Limited, New Delhi.

6.   Berte, A. and G. Means (1933), Modern Corporation and Private Property, Macmillian, New York.

7.   Bhagwati, J. and P. Desai (1972), India : Planning for industrialization, Oxfort University Press, London.

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

9.   Clarkson, K.W. and R Miller (1985), Industrial Organization : Theory, Evidence and Public Policy, McGraw Hill, Kogakusha, Tokyo.

10.   Das, N. (1969), The Public Sector in India, Vora and Company, Bombay.

11.   Das, N. (1960), Employment, Full Employment and India, Asia Publishing House, Bombay.

12.   Dasgupta, P.S. Marglin and A. Sen (1972), Guidelines for Project Evaluation, UNIDO Publications, New York.

13.   Deshpande, L.K. and J.C. Sandesara, Eds. (1970), Wage Policy and Wage Determination in India, Bombay University Press, Bombay.

14.   Deshpande; L.K., P.R. Brahmananda and E.A.G. Robinson, Eds. (1983), Employment Policy in a Developing Economy, Vols. I & II, Macmillian, London.

15.   Devine, P.J. et. Al. (1978), An Introduction to Industrial Economics, 3e, George Allen and Unwin, London.

16.   Dhar, P.N. and H.F. Lydall (1961), The Role of Small Enterprises in Indian Economic Development, Asia Publishing House, Bombay.

Practical/ Field Work

Paper No: 1

Total Marks: 100

(Report Writing = 70 Marks and

Written and Oral Examination: 30 Marks)

Teaching/Practical Workload: 4 Hours Per Week

Analysis of Primay/ Secondary Data
(Report Based on Study Tour/ Industrial Visits/ Field Visits)

Unit 1: Demographic Data   **(15 Periods)**

1. Population at Glance
2. Age and Structure of Population
3. Household data
4. Social Categaroywise Analysis

Unit 2: Economic Suvey of India   **(15 Periods)**

1. Public Finance
2. Agriculture Sector
3. Industurial Sector
4. Service Sector
5. Infrastructure
6. Human Development

Unit3: Economic Suvey of Maharashtra   **(15 Periods)**

1. Agriculture Sector
2. Industurial Sector
3. Service Sector
4. Infrastructure

Unit 4: Field Visit/ Industrial Visit /Study Tour   **(15 Periods)**

1. Visits to Study Area
2. Industiral Visits
3. Field Visits
4. Visits to Academic Institution

Practical/ Field Work (Dissertation)

Paper No: 2

Total Marks: 100

(Disserataion = 70 Marks and

Written and Oral Examination: 30 Marks)

Teaching/Practical Workload: 4 Hours Per Week

DISSERTATION

Unit 1: Introduction and Objectives   **(15 Periods)**

1. Select the topic
2. Define the topic
3. Introduction of topic
4. Significance of the Study
5. Write the Objectives

Unit 2: Review and Research Methodology   **(15 Periods)**

1. Literture Review
2. Formulation of Hypothesis
3. Research Design
4. Select a Sample for Study

Unit 3: Data Analysis   **(15 Periods)**

1. Collection the data
2. Process the data
3. Tabulation and Figures
4. Analyze the data
5. Present the results

Unit 4: Editing and Writing   **(15 Periods)**

1. Editing the Data
2. Writing Chapters
3. Biblography
4. Annexure