

# **SHIVAJI UNIVERSITY, KOLHAPUR.**



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**Accredited By NAAC**

**Revised Syllabus For**

**Master of Arts [M. A. Economics]**

**Faculty of Humanities**

**( M. A. Part - II (Sem. III & IV )**

**(Subject to the modifications to be made from time to time)**

**Syllabus to be implemented from June 2018 Onwards.**

**M. A. Part-II (Semester-III & IV)**

	<b>Semester – III</b>		<b>Semester – IV</b>
(I)	<b>Core/ Compulsory Papers</b>	(I)	<b>Core / Compulsory Papers</b>
EC-5	<b>Statistics in Economic Analysis</b>	EC-7	<b>International Economics</b>
EC-6	<b>Macro Economic Analysis</b>	EC-8	<b>Economics of Growth and Development</b>
(II)	<b>Elective Papers</b>	(II)	<b>Elective Papers</b>
EO-21	Economics of Labour	EO-32	Co-operative Thoughts and Administration
EO-22	Indian Public Finance	EO-33	Statistics for Economics
EO-23	Economics of Transport and Communications	EO-34	Global Business Logistics
EO-24	Indian Economic Policy	EO-35	Health Economics
EO-25	Demography	EO-36	Advanced Banking
EO-26	Urban Economics	EO-37	Welfare Economics
EO-27	Economics of Energy	EO-38	Research Methodology
EO-28	Computer Application in Economics I	EO-39	Econometrics (*) Economic Thoughts of Chh. Shahu Maharaj
EO-29	Mathematical Economics II	EO-40	Computer Application in Economics II
Eo-30	Econometrics I	EO-41	Economics and Law
Eo-31	Social Sector and Environment	EO-42	Econometrics II
(III)	<b>Credit by Choice / Open Electives Offered by Dept. of Economics</b>	(III)	<b>Credit by Choice / Open Electives Offered by Dept. of Economics</b>
ECO- 3.1	Econometrics I	ECO- 4.1	Econometrics II
ECO- 3.2	Demography	ECO- 4.2	Economic Thoughts of Chh. Shahu Maharaj

**Notes:**

- a) EC-1 to EC-8 papers (8 Papers) are core/ compulsory papers.
- b) Student can select any two elective papers from elective category or one paper from elective category and one paper from credit by choice category for each semester offered by other departments on campus.
- c) Each paper will be of 100 marks. (Semester Examination 80 Marks, CIE 20 Marks)

- d) The syllabi of each paper per semester are spread over 60 instructional hours.  
 \* \* Only 20 students are permitted. (Depends on the availability of the Lab. facility)

**Notes: Credit by Choice / Open Electives Offered by the Department of Economics**

- Maximum Intake Capacity for Other Departments: unlimited students
- Maximum Credits for One Paper : 04 credits
- Eligibility : Any student admitted to Post Graduate Class of any Department on University Campus
- Admission will be based on the First- Cum - First Serve Basis

**M. A. Economics, Revised Syllabus**  
**Semester System with Credits and Continuous Internal Evaluation [CIE]**  
**To be introduced w.e.f. June 2018 for M. A. Part –II (Semester-III & IV) in the**  
**Department of Economics, Shivaji University, Kolhapur-4,**  
**[Under Academic Flexibility]**

<b>M. A. Part- II : Semester-III</b>			
<b>Paper Number</b>	<b>Paper Title</b>	<b>Credits</b>	<b>Marks</b>
<b>(I)</b>	<b>Core/ Compulsory Papers</b>		
EC-5	<b>Statistics in Economic Analysis</b>	<b>04</b>	<b>100</b>
EC-6	<b>Macro Economic Analysis</b>	<b>04</b>	<b>100</b>
<b>(II)</b>	<b>Elective / Optional Papers :</b>		
EO-21	Economics of Labour	<b>04</b>	<b>100</b>
EO-22	Indian Public Finance	<b>04</b>	<b>100</b>
EO-23	Economics of Transport and Communication	<b>04</b>	<b>100</b>
EO-24	Indian Economic Policy	<b>04</b>	<b>100</b>
EO-25	Demography	<b>04</b>	<b>100</b>
EO-26	Urban Economics	<b>04</b>	<b>100</b>
EO-27	Economics of Energy	<b>04</b>	<b>100</b>
EO-28	Computer Application in Economics I	<b>04</b>	<b>100</b>
EO-29	Mathematical Economics II	<b>04</b>	<b>100</b>
EO -30	Econometrics I	<b>04</b>	<b>100</b>
EO-31	Social Sector and Environment	<b>04</b>	<b>100</b>

## STATISTICS IN ECONOMIC ANALYSIS

### EC -5 (Compulsory Paper)

#### PREAMBLE

The main objective of this paper is to train the students to use the techniques of statistical analysis, which are commonly applied to understand and analyze economic problems. The emphasis of this paper is on understanding economics with the help of quantitative techniques. Hence, in this paper a student will be initiated into various economic concepts, which are amenable to mathematical treatment.

- Unit 1: Descriptive Analysis** (15 Periods)
- 1.1. Central Tendency: Meaning, Concept, Objectives of Averaging, Requisites of a Good Average
  - 1.2. Measures of Central Tendency: Mean, Median, Mode, Harmonic Mean, Geometric Mean
  - 1.3. Dispersion: Meaning, Concept, Objectives of Measuring Dispersion, Properties of a Good Measure of Dispersion
  - 1.4. Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation and its relative measures
- Unit 2: Skewness, Moments and Kurtosis** (15 Periods)
- 2.1. Skewness: Meaning, Concept, Test of Skewness
  - 2.2. Measures of Skewness: Absolute Measures and Relative Measures-Karl-Pearson's Coefficient of Skewness, Bowley's Coefficient of Skewness, Kelly's Coefficient of Skewness.
  - 2.3. Moments: Meaning, Concept, Objectives, Moments about the Mean, Moments about the arbitrary origin
  - 2.4. Kurtosis: Meaning, Concept, Measures of Kurtosis
- Unit 3: Correlation Analysis** (15 Periods)
- 3.1. Correlation: Meaning, Concept and Importance
  - 3.2. Types of Correlation: Positive and Negative Correlation- Simple, Partial and Multiple Correlation- Linear and Non-linear Correlation

Methods of studying correlation: Scatter Diagram Method, Graphical Method,

**3.3.** Karl Pearson's coefficient of correlation, Spearman's rank coefficient of correlation and Concurrent Deviation Method

**3.4.** Probable Error of the Coefficient of Correlation and its Interpretation- Coefficient of Determination

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

**4.1.** Regression: Meaning, Concept and Importance – Comparison of Correlation and Regression

**4.2.** Methods of estimating regression: Graphic Study of Regression, Freehand Curve Method, Method of Least Squares

**4.3.** Regression Equations: Properties of Regression Coefficients-Properties of Regression Lines

**4.4.** Standard Error of estimate.

#### **READING LIST:**

1. Allen, R. G. D. (1974), *Mathematical Analysis for Economists*, Macmillan Press and ELBS, London.
2. Baumol, W. J. (1984), *Economic Theory and Operations Analysis*, Prentice Hall, Englewood Cliffs, New Jersey.
3. Chiang, A. C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.
4. Croxton, Crowden and Klein (1971), *Applied General Statistics*, Prentice Hall of India, New Delhi.
5. Elhance, D.N., Elhance, Veena and Aggarwal, B. M. (2015) *Fundamentals of Statistics*, KitabMahal, Allahabad
6. Goon, A. M., M. K. Gupta and B. Dasgupta (1993), *Fundamentals of Statistics*, Vol. 1, The World Press Ltd., Calcutta.
7. Gupta, S. C. (1993), *Fundamentals of Applied Statistics*, S. Chand & Sons., New Delhi.
8. Gupta, S.P. (2016) *Statistical Methods*, Sultan Chand & Sons, New Delhi
9. Handry, A. T. (1999), *Operations Research*, Prentice Hall of India, New Delhi.

10. Hogg, R. V. and A. T. Craig (1970), Introduction to Mathematical Statistics (3<sup>rd</sup>Edition), Macmillan Publishing Co., New York.
11. Millar, J. (1996), Statistics for Advanced Level, Cambridge University Press, Cambridge.
12. Monga, G. S. (1972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.
13. Nagar, A. L. and R. K. Das (1993), Basic Statistics, Oxford University Press, New Delhi.
14. Reddy, C. R. (1990) : Quantitative Methods for Management Decision, Himalaya Publishing House, Mumbai.
15. Singhal Mohan (2005:06) : Elements of Statistics, Lakshmi Narain Agrawal, Agra.
16. Speigal, M. R. (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.
17. Sukhatme, P. V. and B. V. Sukhatme (1970), Sampling Theory of Survey with Applications, Iowa State University Press, Ames.
18. Taha, H. A., (1997), Operations Research: An Introduction (6<sup>th</sup> Edition), Prentice Hall of India Pvt. Ltd., New Delhi.
19. Yamane, Taro (1975), Mathematics for Economists, Prentice Hall of India, New Delhi.

## **MACRO ECONOMIC ANALYSIS**

### **EC – 6 (Compulsory Paper)**

#### **PREAMBLE:**

Macroeconomics or aggregative economics analyses 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)**

**1.1. National Income: Meaning and Associated Concepts**

- 1.2. Circular Flow of Income in –two, three and four sector economy;
- 1.3 Different forms of national income accounting– social accounting, input-output accounting,
- 1.4. Flow of funds accounting and balance of payments accounting.

**Unit 2: Keynesian synthesis, New Classical and New Keynesian Macroeconomics (15 Periods)**

- 2.1. Keynesian views on interest; The IS-LM model;  
Extension of IS-LM model with government sector- Extension of IS-LM models with Labor market and flexible prices. Relative effectiveness of monetary and fiscal policies
- 2.2.
- 2.3. The new classical critique of micro foundation -The Concept of Rational Expectations -Basic approach and policy implications
- 2.4. New Keynesian Economics - Sticky Nominal prices (Mankiw Model); Supply Side Economics

**Unit 3: Supply of money and Post-Keynesian approaches to Demand for Money (15 Periods)**

- 3.1. Money supply-Measures, Determinants and Control
- 3.2. Money Supply and the Open Economy
- 3.3. Approaches to Demand for Money: Tobin, Baumol and Patinkin
- 3.4. Friedman and the modern quantity theory

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

- 4.1. Classical, Keynesian and Monetarist approaches to inflation-Structuralist theory of inflation- Policies to control inflation

- 4.2. Philips curve analysis – Short run and long run Phillips curve
- 4.3. Samuelson and Solow – the natural rate of unemployment hypothesis; Tobin's modified Philips curve
- 4.4. Theories of Business Cycles: Samuelson, Hicks and Goodwin model- Control of business cycles

## **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*, (3<sup>rd</sup> Edition), Harper and Row, New York.
4. Culbertson, J. M. (1968), *Macroeconomic Theory and Stabilization Policy*, McGraw Hill, Kogenkosh, Tokyo.
5. Dornbusch, R. and F. Stanley (1997), *Macroeconomics*, McGraw Hill, Inc., New York.
6. Duesenberry, J. S. (1949), *Income, Saving and the Theory of consumer Behaviour*, Harvard University Press, Harvard.
7. Edey, M. and A. T. Peacock (1967), *National Income and Social Accounts*, Hutchinson University Library, London.
8. Frisch, H. (1983), *Theories of Inflation*, CambridgeUniversity Press, Cambridge.
9. Gordon, R. A. (1961), *Business Fluctuations*, Harper and Row.
10. Gordon, R. and S. G. Harris (1998), *Macroeconomics*, Addison Wesley.
11. Gordon, R. and S. G. Harris (1998), *Macroeconomics*, Addison Wesley, Massachusetts.
12. Hall, R. E. and J. B. Taylor (1986), *Macroeconomics*, W. W. Norton, New York.
13. Heijdra, B. J. and V. Frederick (2001), *Foundations of Modern Macroeconomics*, OxfordUniversity Press, New Delhi.
14. Hicks, J. R. (1950), *A contribution to the Theory of Trade Cycles*, Clarendon Press, Oxford.
15. Jha, R. (1991), *contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.



16. Jha, R. (1999), Contemporary Macroeconomic Theory and Policy, New Age International (P) Ltd., New Delhi.
17. Keynes, J. M. (1936), The General Theory of Employment, Interest and Money, Macmillan, London.
18. Levacic, R. and A. Rebman (1986), Macroeconomics: An Introduction to Keynesian and Neo-classical Controversies, Macmillan, London.
19. Lucas, R. (1981), Studies in Business Cycle Theory, M. I. T. Press, Cambridge, Massachusetts.
20. Mankiw, N. G. and D. Romer (Eds.) (1991), New Keynesian Economics, (2 Vols.), MIT Press, Cambridge.
21. Mankiw, N. G. and D. Romer (Eds.) (1991), New Keynesian Economics, (2 Vols.) MIT Press, Cambridge.
22. Mueller, M. G. (1966), Readings in Macroeconomics, Holt Rinehart and Winston, New York.
23. Patinkin, D. (1965), Money, Interest and Prices, Harper and Row, New York.
24. Powelson, J. P. (1960), National Income And Flow of Funds Analysis, McGraw Hill, New York.
25. Rakshit, M. (1998), Studies in the Macroeconomics of Developing Countries, Oxford University Press, New Delhi.
26. Rao, V. K. R. V. (1983), India's National Income: 1950 to 1980, Sage Publications, New Delhi.
27. Romer, D. L. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New York.
28. Ruggles, R. and N. Ruggles (1956), National Income Accounts and Income Analysis, McGraw Hill, New York.
29. Scarfe, B. L. (1977), Cycles, Growth and Inflation, McGraw Hill, New York.
30. Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.
31. Sheffrin, S. M. (1996), Rational Expectations, Cambridge University Press, Cambridge.
32. Taylor, L. (1983), Structuralist Macroeconomics, Basic Books, New Longman.
33. United Nations (1974), Year Book of National Account Statistics.

**ECONOMICS OF LABOUR**  
**EO- 21 (Elective paper)**

**PREAMBLE:**

Labour market issues are important for students of Micro, Macro, and Labour Economics. The course sheds light on a range of issues related to the economic theory, new developments and a host of issues studied by generations of labour market experts. It attempts to capture the interplay of various factors in the labour market by describing demand - supply aspects, Micro and Macro Approaches in Labour Markets, Discrimination and unemployment, labour contracts, Regulation and International labour standards, workers' participation and impact of new labour policies in the labour market of India and the World.

**Unit 1: Labour market and Macro-economics (15 Periods)**

- 1.1. Labour market: Concept- Characteristics- Types
- 1.2. The theory of Human Capital: Investment in Human Capital- Costs and life-time benefits of education.
- 1.3. Classical Analysis – Neo classical Analysis – Keynesian Analysis- Dual and segmented labour Market Theory – Marxian Alternative
- 1.4. Flexibility and Institutions in labour Market.

**Unit 2: Micro and Macro Approaches in Labour Markets (15 Periods)**

- 2.1. The theory of labour demand- time period and types of markets- industry demand for labour- Determinants of labour demand
- 2.2. The theory of supply- Work-leisure choice in indifference curves- Budget constraints- Utility maximization- Backward-bending labour supply curve and its applications.
- 2.3. The inflation unemployment trade-off - Nominal Rigidities.
- 2.4. Regulation of Labour – Experience of India vis-a-vis Other Countries – International Trade and Labour Markets.

**Unit 3: Discrimination, Unemployment and Labour Contracts (15 Periods)**

- 3.1. Economic Effects of Prejudice : Theoretical Analysis – Wage Differentials by Race and Sex.
- 3.2. Concept and Measurement of unemployment– Job Search –Unemployment

insurance.

**3.3.** Employment Determination – Allocation of Risk- Compensation – Bonding

Incentive Pay- Multitasking – Team Production – Relational Contracts –

**3.4.** Career Concerns – Wages and Promotions.

**Unit 4: State and Labour (15 Periods)**

State and social security of labour: Concept of social security- social assistance

**4.1.** and social insurance- Review of state policies with respect to social security and labour welfare in India.

**4.2.** Problems of labour; Recent labour legislations and labour market reforms in India- Labour retrenchments.

**4.3.** Receding state and its effect on working of labour markets- International labour standards.

**4.4.** Exit policy- need for safety nets- measures imparting flexibility in labour market- Second National Commission on Labour

## READING LIST

1. Ashenfelter, O, and G.E. Johnson (1969), 'Bargaining Theory, Trade Unions, and Industrial Strike Activity', *American Economic Review*, 59 (1), 35-49.
2. Booth, A.L. (1995), *The economics of the trade union* Cambridge University Press, Chapters 3,4,5,7, and 8.
3. Bronars, Stephen, Donald Deere and Joseph Tracy. 1994. "Unionization and Profitability : Evidence of Spillover Effects", *Journal of Political Economy*, 102(6): 1281-1288.
4. Calmfors, Lars and John Driffill. 1988. "Macroeconomic Effects of Centralized Wage Setting", *Economic Policy*, 6:13-61.
5. Chaudhuri, K. and Pal, R.(2005) *An Empirical Analysis of Industrial Disputes: Evidence from Indian States* (Co-author K. Chaudhuri), *Journal of Quantitative Economics, New Series* Vol 3, No.1
6. Cramton P.M. Gunderson and J. Tracy (1999), "The Effect of Collective Bargaining Legislation on Strikes and Wages", *Review of Economics and Statistics*, 81(3), 471-487.
7. D.C. – Standing G. and V. Tokman(Eds.) (1991), *Towards Social Adjustment*, ILO, Geneva.

8. Datt R.(2000), “Regional Patterns of Industrial Relations in India: Changing Scenario after Liberalization”, *Indian Journal of Labour Economics*, 43(4), 1061-1098.
9. Deshpande, S.G. Standing, and L.K. Deshpande, (1998), *Labour Flexibility in a Third World Metropolis*, Commonwealth Publishers’, New Delhi. –
10. Dowrick, S. (1989), *Union-Oligopoly Bargaining*, *Economic Journal*, 99:1123-1142.
11. E Malinvaud, 1977 *The Theory of Unemployment Reconsidered*, Basil Blackwell, Oxford.
12. Gibbons, Robert, and Kevin J. Murphy. 1992. “Optimal Incentive Contracts in the Presence of Career Concerns: Theory and Evidence”. *Journal of Political Economy* 100:468-505.
13. Hauseman, S. (1991), *Industrial Restructuring with Job Security*, Harvard University Press, Cambridge,
14. Holmstrom, Bengt, and Paul Milgrom. (1991). “Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design. “*Journal of Law, Economics, and Organization* 7:24-53.
15. Kraft, K. (1998). The codetermined firm in oligopoly. *Economics Letter*, 61(2):195-201.
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17. Lazear, Edward, (2000). “Performance Pay and Productivity”. *American Economic Review* 90:1346.
18. Lazear, Edward, and Sherwith Rosen. (1981). “Rank-Order Tournaments as Optimum Labour Contracts”. *Journal Political Economy* 89:84-864.
19. Machin, Steven and Sushil Washwani, 1991. “The Effects of Unions on Organizational change and Employment”, *Economic Journal*, 101(407): 835-855.
20. Majumdar, S. and Saha, B.(1998). Job security, wage bargaining and duopoly outcomes. *Journal of international Trade and Economic Development*, 7(4): 389-403.
21. Mass. –MHRD, GOI(1987), *Shram Shakti :Report of the National Commission on Self-employed Women and Women Workers in the Informal Sector*; Ministry of Human Resources Development, New Delhi, -
22. McDonald, I.M. and Solow, R.M.(1981). Wage bargaining and employment. *American Economic Review*, 71(5) :896-908.

23. Misra. L.(2000), Child Labour in India, Oxford University Press, New Delhi,- Riveros, L.(1999), Labour Market Policies and Labour Market Reforms in Socialist Economics, World Bank, Washington
24. Mukhopadhyay, S, 1983, Unemployment, Job Search and the Optimal Waiting Time’, Indian Journal of Labour Economics, 25(3): 198-217.
25. Oswald, A.J. (1982). Trade Unions, wages and unemployment: What can simple models tell us? Oxford Economic Papers, 34(3) : 526(45).
26. Schmidt, C.M., A. Stilz and K.F.Zimmermann (1994) : “Mass Migration, Unions, and Government Interventions”, Journal of Public Economics, 55, 185-210.

## **INDIAN PUBLIC FINANCE**

### **EO –22 (Elective paper)**

#### **PREAMBLE:**

There is great socio-economic significance of public finance, both in developed and developing countries. This paper analyse important issues in Indian public finance in the context of the India’s economic development. It deals with the effectiveness of public finance in India. The objective of this paper is to provide a detailed treatment of issues in Indian public finance to those intending to specialise in this area. Student should know the public revenue, public expenditure, debt, budgets and federal finance system in India. This paper also intends to familiarize students to analyse the issues related with tax system, expenditure programmes and debt issues, deficit financing, federal finance and stabilization instruments

#### **Unit 1: Public Revenue (15 Periods)**

- 1.1. Sources of revenue and Indian Tax system.
- 1.2. Trends in revenue: Direct and indirect taxes in India in last decade
- 1.3 Brief review of tax reforms pre 1991 and detailed in post 1991 period.
- 1.4. Changing incidence of income tax, Goods and Services Tax, taxation on agriculture.

#### **Unit 2: Public expenditure and public debt (15 Periods)**

- 2.1. Trends in public expenditure of central and state governments in last decade
- 2.2. Role of public expenditure in economic development.

2.3. Trends in public debt in last decade - internal and external

2.4. Public debt management in India.

**Unit 3: Deficit financing, local finance and fiscal policy (15 Periods)**

3.1. Deficit financing: concepts and measures in India and trends in last decade.

3.2. Analysis of central and state governments in last three budgets

3.3. Sources of local finance- financial dependency- measures for improvement of local finance

3.4. Fiscal crisis and fiscal reforms in India, Fiscal Responsibility and Budget Management

**Unit 4: Federal finance (15 Periods)**

4.1. Constitutional provisions- role of finance commission in federal set-up- Gadgil formula

4.2. 10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup> reports of Finance Commissions in India

4.3. 14<sup>th</sup> Finance Commission: terms of reference, issues and approach, recommendations;

4.4. Problem of fiscal imbalances, vertical and horizontal

**READING LIST:**

1. Academic Foundation (2003): "Reports on India's Tax Reforms," Academic Foundation, New Delhi.
2. Amaresh Bagachi and Nicholas Stern (1994): "Tax Policy and Planning in Developing Countries," Oxford University Press, New Delhi.
3. Annual Economic Survey: published by Ministry of Finance, Government of India
4. Bird R. M. and O. Oldman (1967): "Readings on Taxation in Developing Countries." edited, Cambridge, Mass: Harvard Law School, International Tax Program.
5. Cut James (1969): "Taxation and Economic Development of India," Vikas Publication, New Delhi.
6. Datta and Sundharam (2018): "Indian Economy" S. Chand & Company, New Delhi
7. David Newbery (1987): "Theory of Taxation for Developing Countries," edited, IBRD, World Bank for Research Publication, Washington.
8. Economic and political weekly- various issues

9. FICCI (1984): "Problems of Tax Reforms Optimum Taxation," Federation of Indian Chambers of Commerce and Industry, New Delhi.
10. Handbook of Statistics on the Indian Economy: Reserve Bank of India
11. Hinrichs H. (1966): "A General Theory of Tax Structure Change During Economic Development," Cambridge, Mass: Harvard Law School, International Tax Program.
12. IBRD (1997): "Tax Reforms in Developing Countries," Thrisk, Wayne Ed. New Delhi.
13. Indian Public Finance Statistics, Ministry of Finance, Government of India, New Delhi.
14. Jalan Bimal (2002): "India's Economy in the New Millennium: Selected Essays," UBS Publishers and Distributors, New Delhi.
15. Kaldor N. (1956): "Indian Tax Reforms," Department of Economic Affairs, Ministry of Finance, India.
16. Kapital Uma (2003): "Indian Economy since Independence" Academic Foundation.
17. Patil J. F. & V. S. Patil (March 2007): "Service Tax in India," edited, Shivaji University, Kolhapur.
18. Patil J. F. (1983): "Taxation for Development in Maharashtra," Continental Prakashan, Poona.
19. Patil J. F. (ed) (2004): "Public Economics," Phadke Prakashan, Kolhapur (Marathi edition).
20. Public Finance Review (Journal)- various issues
21. Puttaswamaiah, K. (1994): "Economic Policy and Tax Reforms in India," edited, Indus Publishing Co., New Delhi.
22. Report of 14<sup>th</sup> Finance Commission 2015-20, Government of India, New Delhi.
23. Report of Finance Commission, Government of India, New Delhi.
24. Report of the Advisory Group on Tax Policy and Tax Administration for the Tenth Plan (May 2001): Planning Commission, Government of India, New Delhi.
25. Report of the Indirect Taxation Enquiry Committee (1977): Ministry of Finance, Government of India, New Delhi.
26. Report of the Task Force on Implementation of the Fiscal Responsibility and Budget Management Act (2004): Ministry of Finance, Government of India, New Delhi.
27. Report of the Task Force on Indirect Taxes (2002): Chairman-Vijay L. Kelkar, Ministry of Finance and Company Affairs, Government of India, December, 26.

28. Report of the Tax Reforms Committee -I & II (1992 &93):Chairman-Raja J. Chelliah.
29. Reserve Bank of India Bulletin (Monthly)
30. South Asian Journal of Macroeconomics and Public Finance (Journal)- various issues
31. The Report on Currency and Finance: published by Reserve Bank of India
32. Yadav S. B. and J. F. Patil (2009): “Service Tax in India” Bharati Press, Kolhapur.
33. www.fincomindia
34. www.finmin.nic.in
35. www.imf.org.in
36. www.indiabudget.nic.in
37. www.nipfp.org.in
38. www.rbi.org.in

## **ECONOMICS OF TRANSPORT AND COMMUNICATION**

### **EO–23 (Elective Paper)**

#### **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. The role of communication in economic development is also equally important. The modern communication means like internet, telephone and TV are now converging into one mega and multifaceted tool which may have long term impact. The role of private players is also increasing and so the regulatory role of the government. The present paper gives exposures to the issues and options in the field of transport and communication.

- |             |   |                     |
|-------------|---|---------------------|
| <b>Unit</b> | <b>1: Introduction of Transport and Road Transport</b>  | <b>(15 Periods)</b> |
|             | <ol style="list-style-type: none"> <li>1.1. Meaning of transport – Classification of transportation – Significance of transport – Transport and Economic Development</li> <li>1.2. Road Transport: Nature and significance –Types of Road- Operational framework of passenger Road transport system in India: State Road Transport Corporations–Departmental undertakings-Municipal undertakings- Government Companies</li> <li>1.3. Road development in India – National Urban Renewal Mission – National Highways- Inter-state importance- Road development in sensitive boarder</li> </ol> |                     |



areas and tribal roads

- 1.4. City transport in India: Means of Transport-Mass Transport System- Problems of City Transport

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

- 2.1. Nature and scope of Railway transport–Laws of Returns and Railway transport.
- 2.2. Indian Railways: Growth of Railway during Pre and Post-Independence period- Railway Electrification
- 2.3. Mobility of Indian Railway to Passengers: Types of Travel- Convenience and Comfort- Railway Tourism
- 2.4. Rail Transport Policy: Pricing of Railway Transport Services(Passengers and Goods)– classification of goods- Metro, Mono and Bullet Train

**Unit 3: Water Transport and Air Transport (15 Periods)**

- 3.1. Water Transport: Scope and significance – Growth of water transport in India – Inland and ocean transport- Modes of transportation and their advantages and disadvantages - Problems of water transport
- 3.2. Indian shipping – Ports and harbors – Different types and size of ships (Foreign going, Coastal, inland vessels etc.) – Concept of Multimodal Transport –Risk and liabilities of Multimodal Carrier
- 3.3. Air Transport: Nature and Significance –Growth of Air Transportation in India - Civil Aviation in India: Establishment-administrative structure-types of airline operations- Airport functions-Chicago convention on international aviation
- 3.4. Nationalization and privatization of air transport. – Problems of Air Transport- Recent Developments in Air Transport in India

**Unit 4: Economics of Communication (15 Periods)**

- 4.1. Communication–Classification, Significance and Growth in India
- 4.2. Media – Print, Electronic and Social media- Technological development in media-Role of media in economic development
- 4.3. Tele conferencing – Prasar Bharati –Public (BSNL and MTNL) and Private Service Providers

#### 4.4. Advertisements in communication – Communication policy of India

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#### **INDIAN ECONOMIC POLICY EO- 24 (Elective Paper)**

#### **PREAMBLE:**

This paper aims to acquaint the students of economics with the important economic policies framed and implemented in India and having significant bearing on the economic development of the country. The thorough understanding of Indian economic policies is a must

for post graduate students of economics and that is what this paper aims to develop among the students.

**Unit 1: Economic Development and Planning in India (15 Periods)**

- 1.1. Approaches to economic development and its measurement; Role of State, market and other institutions.
- 1.2. Objectives and strategy of planning in India; failures and achievements of plans;
- 1.3. New thinking on the role of state in the economy;
- 1.4. Policy formulation: Planning Commission and NITI Aayog

**Unit 2: Policies Relating to Agricultural Sector (15 Periods)**

- 2.1. Land reforms in India; New Agricultural Strategy (Green Revolution); New Initiatives for water conservation.
- 2.2. Pricing of agricultural inputs and output.
- 2.3. Agricultural finance policy; Agricultural Marketing and Warehousing
- 2.4. Policy regarding food security; policies for sustainable agriculture.

**Unit 3: Industrial & Foreign Trade Policy (15 Periods)**

- 3.1. Public sector enterprises (PSEs) – policy during the pre and post 1991 period; policy of privatization and disinvestment of PSEs; Companies Act 2013, Make in India policy, Policy for the development of Micro, Small and Medium Enterprises
- 3.2. (MSMEs); Mudra Policy
- 3.3. Issues in labour market reforms; exit policy - Insolvency & Bankruptcy Code (IBC) 2016.
- 3.4. Foreign trade policy since 1991

**Unit 4: Fiscal and Financial Sector Policy (15 Periods)**

- 4.1. Centre-State financial relations.
- 4.2. Fiscal policy during last decade- The FRBM Act- fiscal sector reforms in India.
- 4.3. Review of monetary policy of RBI in last decade.
- 4.4. Financial sector reforms after 1991; SEBI and capital market in India.

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## **DEMOGRAPHY**

### **EO – 25 (Elective Paper)**

#### **PREAMBLE**

The main objective of this paper is to make the students aware of the importance of population in economic development and the various theories that explain the growth of population in a country. The paper also enlightens the student on the quantitative and the qualitative aspects and characteristics of the population through various demographic techniques. In recent times, changing characteristics of the population have acquired importance and these have also been included in the framework of study. Migration and urbanization are the characteristics of structural change taking place in a society. Their study is essential to understand the dynamics of this change. The paper exposes the students to sources of population and related characteristics as also to the rationale, need and evolution of population policy.

- Unit 1: Population and Development** (15 Periods)
- 1.1.** Population growth and Development and their inter-dependence- Factors affecting Population Change

- 1.2. Measures of population change- Structure and distribution of population data- Demographic dividend I and II
- 1.3. Theories of population: Malthus and Theory of Demographic Transition - The Idea of Maximum Population
- 1.4. Views of Meadows, Enke and Simon on Population and development
- Unit 2: Structure of Population** (15 Periods)
- 2.1. World Population trends in the twentieth century- Population explosion: Threatened or real- distant or imminent
- 2.2. International aspects of population growth and distribution
- 2.3. Pattern of age and sex structure in more developed and less developed countries
- 2.4. Determinants and Demographic effects of sex and age structure- economic and social implications- Age pyramids and projections – Individual aging and population aging.
- Unit 3: Fertility, Nuptiality and Mortality** (15 Periods)
- 3.1. Importance of study of fertility – Total fertility rate, Gross and net reproduction rate- trends in fertility in developed and less developed countries- Factors affecting fertility
- 3.2. Nuptiality: Concept and analysis of marital status- single mean age at marriage- Synthetic cohort methods- Trends in age at marriage  
Death rates- crude and age-specific -Mortality at birth and infant mortality
- 3.3. rate- levels and trends in more and less developed countries Sex and age pattern of mortality
- 3.4. Factors for decline in mortality in recent past- Life table – Concepts of stable population- Methods of population projection
- Unit 4: Migration, Urbanization and Demographic Database in India** (15 Periods)
- 4.1. Migration: meaning, types, temporary, internal and international- International migration: effect on population growth and pattern- Factors affecting migration
- 4.2. Urbanization – Growth and distribution of rural-urban population in India
- 4.3. Study of census in India – Methodology and characteristics- 2011 census in



India

**4.4. Functional Organization of Census of India- Changing characteristics of population in India- National Population Policy-2000**

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## **URBAN ECONOMICS**

### **EO – 26 (Elective Paper)**

#### **PREAMBLE:**

Urbanization is an indicator of economic growth. Developed countries have higher and rapid urbanizations than the developing countries. Rapid urbanizations results in increased demand for urban infrastructure development and provision of utility services. The urban local governments can play a significant role in that context. Hence these are important issues necessary to study. The exclusive objective of this paper is to enable the students the knowledge of urbanization, urban problems, financing of infrastructure, urban planning and

role of urban local government.

**Unit 1: URBANISATION AND HUMAN SETTLEMENTS (15 Periods)**

- 1.1. Urbanization: Meaning – World Urbanisation - Urbanization in India; urban size and growth - Pattern of urbanization
- 1.2. Urban morphology- factors of urbanization.
- 1.3 Human Settlements: urban spatial structure
- 1.4. Agglomeration economics – urban sprawl

**Unit 2: ECONOMICS OF CITY SIZE (15 Periods)**

- 2.1. Smart city: Concept – Problems and Prospects
- 2.2. Market forces in the development of cities- size of city
- 2.3. Economics of location: Central place theory-Industrial location theory
- 2.4. Economic base theory and economic base multiplier

**Unit 3: URBAN PROBLEMS (15 Periods)**

- 3.1. Housing and Slums -Drinking Water - Sanitation system
- 3.2. Urban crime-- Poverty and inequality – Urban quality of life measurement
- 3.3. Transport and Communication
- 3.4. Urbanization and Climate change

**Unit 4: URBAN PLANNING AND MANAGEMENT (15 Periods)**

- 4.1. Concept of town and urban planning – Urbanization Policy –Role of real estate.
- 4.2. Financing of urban infrastructure: Municipal bonds
- 4.3. Role of civil society in Planning and Management
- 4.4. Urban Local government – Role – revenue sources - Municipal Administration

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## **ECONOMICS OF ENERGY**

### **OE- 27 (ELECTIVE / OPTIONAL COURSE)**

#### **PREAMBLE:**

Resources play a very crucial role in the rapid and over all development of the economy. All resources are scarce, but natural resources more scare. Hence it is very much essential the preservation, conservation, protection and growth of all resources in general, and natural resources in particular. It is not that only conservation, protection and growth of resources is sufficient, but their proper allocation, and optimum and rational utilisation is also of crucial importance. Energy is a very valuable natural resource being demanded not only for production, but also for consumption. This demands to study energy in economic perspective. It is against this backdrop, the present course has been introduced. The present course will equip the students with the theoretical as well empirical aspects of energy. More importantly, it will train the students about the energy and environmental crisis.

#### **Unit 1: INTRODUCTION TO ECONOMICS OF ENERGY (15 Periods)**

- 1.1. Natural Resources: Classification - Importance - Role in Economic Development
- 1.2. Energy Resources : Types and Classification - Properties of Energy - Forms of Energy
- 1.3 Energy Indicators
- 1.4. Emergence of Energy Economics: Nature and Scope - Energy Economics in relation with other branches

- Unit 2: ENERGY AND DEVELOPMENT** (15 Periods)
- 2.1. Role of Energy in Economic Development
  - 2.2. Energy Intensity and Energy Elasticity: National and International comparison; Low, Middle and High Income Economies  
Role of International Institutions; OPEC (Organization of the Petroleum Exporting Countries) OAPEC (Organization of Arab Petroleum Exporting Countries)
  - 2.3. IEA (International Energy Agency) and World Bank.
- Unit 3: ENERGY CONSERVATION AND ENVIRONMENT** (15 Periods)
- 3.1. Energy Planning, Energy Conservation and Energy Management: Meaning, Objectives and Importance
  - 3.2. Recent Developments: Energy Auditing - Energy Accounting - Energy Pricing
  - 3.3. Energy Crisis: Causes, Consequences - Remedial measures
  - 3.4. Environmental Crisis: Causes, Consequences, Remedial Measures - Impact of Energy Consumption and Production on Environment
- Unit 4: ENERGY PROFILE OF INDIA** (15 Periods)
- 4.1. Indian Energy Sector - Organizational Structure
  - 4.2. Energy Supply (Coal, Lignite, Oil, Gas and Powers - Hydro, Nuclear, Thermal)
  - 4.3. Energy Demand (Agriculture, Industry, Transport, Domestic, etc)
  - 4.4. Energy Policy of India- Energy under Five Year Plans

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## **COMPUTER APPLICATION IN ECONOMICS – I**

### **EO-28 (Elective Paper)**

#### **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 System** (15 Periods)

**1.1.** Computer: Meaning, concepts and Characteristics

**1.2.** Types of computers and their applications

**1.3** Basic components of computer – CPU, Input Devices, Output Devices

**1.4.** Graphic User Interface

**Unit 2: Computer Fundamentals** (15 Periods)

**2.1.** Hardware and Software

**2.2.** Operating System: Meaning and Functions

**2.3.** Memory: Storage Devices-Internal and External- RAM and ROM

- 2.4. Computer Language - Binary, Assembly and High-Level Languages;  
Computer Translators - Assemblers, Compilers and Interpreters

**Unit 3: Descriptive Statistics** (15 Periods)

- 3.1. Central Tendency: Meaning, concept and objectives  
3.2. Measures of Central Tendency: Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic Mean  
3.3. Measures of Dispersion: Range, Quartile Deviation, Mean Deviation  
3.4. Standard Deviation and Coefficient of Variation

**Unit 4: Growth Rates and Graphs** (15 Periods)

- 4.1. Growth Rates: Simple Growth Rate  
4.2. Compound Growth Rate  
4.3. Diagrammatic Presentation of Data: Line Graph, Bar Diagram, Frequency and Polygon  
4.4. Histogram, Pie Chart, and Ogive Curve

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## MATHEMATICAL ECONOMICS-II

### EO-29 – (Elective Paper)

#### PREAMBLE:

Mathematical economics deals with various applications of mathematical tools and techniques in defining and developing economic relationships. This course has been accordingly designed to include various mathematical techniques/methods/models related to the different parts of economic theory like consumer theory, theory of production, pricing etc. Mathematical economics deals with various applications of mathematical tools and techniques in defining and developing economic relationships. The paper covers important aspects of micro economics; macroeconomics and the various modules have been accordingly designed.

#### **Unit 1: Game Theory and Input-Output Analysis (15 Periods)**

- 1.1. Concept of game – Two-person zero-sum game, Pay-off matrix, pure and mixed strategies,
- 1.2. Maximin and minimax solutions, Saddle point solution; Non-constant sum game
- 1.3. Input-output analysis: Open and closed systems,
- 1.4. Hawkins-Simon conditions; Leontief's dynamic model and static model

#### **Unit 2: Linear Programming (15 Periods)**

- 2.1. Linear programming – Basic concept of linear programming problem (LPP), Assumptions, Applications
- 2.2. Properties of Linear Programming Solution
- 2.3. Solution of LPP by graphical and simplex method
- 2.4. Primal and dual problem, application LP in economics

#### **Unit 3: National Income Determination (15 Periods)**

- 3.1. National Income: Meaning, Concepts
- 3.2. National Income Determination in two sector economy
- 3.3. National Income Determination in three sector economy, Balanced Budget Multiplier
- 3.4. National Income Determination in four sector economy

**Unit 4: Theory of Distribution and Consumption (15 Periods)**

- 4.1. Euler's theorem, Ricardian theory of distribution,
- 4.2. Marxian theory of distribution; Kaldor's model of distribution.
- 4.3. Consumption function, static and dynamic multiplier,
- 4.4. Acceleration principle

**READING LIST**

1. Abel, A., B. S. Bernanke and B. Mcnabb (1998), *Macroeconomics*, Addison Wesley, Massachusetts.
2. Allen, R. G. D. (1974), *Mathematical Analysis for Economics*, Macmillan Press and ELBS, London.
3. Allen, R. G. D. (1976), *Mathematical Economics*, Macmillan, London.
4. Arrow, K. J. and M. Intrilligator (Eds.) (1982), *Handbook of Mathematical Economics*, Volumes I, II and III, North Holland, Amsterdam.
5. Barro, R. J. and H. Grossman (1976), *Money, Employment and Inflation*, Oxford University Press, Oxford.
6. Chiang, A. C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.
7. Chung, J. W. (1993), *Utility and Production: Theory and Applications*, Basil Blackwell, London.
8. Ferguson, C. E. (1976), *Neo-classical Theory of Production and Distribution*.
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11. Hiller, F. S. and G. J. Lieberman (1985), *Operations Research*, C. B. S., New Delhi.
12. Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
13. Jones, H. G. (1976), *An Introduction to the Modern Theory of Economic Growth*, McGraw Hill-Kogakusha, Tokyo.
14. Kothari, C. R. (1992), *An Introduction to Operations Research*, Vikas Pub. House, New Delhi.
15. Kuhn, Harold W. (Ed.) (1997), *Classics in Game Theory*, Princeton, University Press, Princeton.
16. Mankiw, N. G. and D. Romer (Eds.) (1991), *New Keynesian Economics (2 Vols.)*, MIT Press, Cambridge, Mass.
17. Mustafi, C. K. (1992), *Operations Research: Methods and Practice*, Wiley Eastern, New Delhi.

18. Nash, J. F. (1996), Essays on Game Theory, Cheltenham, U. K.

**Econometrics-I**  
**EO- 30 (Elective Paper )**

**PREAMBLE:**

Applications of economic theory need a reasonable understanding of economic relationships and relevant statistical methods. The econometric theory thus becomes a very powerful tool for understanding of applied economic relationships and for meaningful research in economics. This paper accordingly is devoted to equip the students with basic theory of econometrics and relevant applications of the methods. The course covers various econometric methods those needed for applied economics and applied economic research.

- Unit 1: Basics Econometrics** (15 Periods)
- 1.1. Econometrics: Meaning, definition and scope
  - 1.2. Methodology of Econometrics
  - 1.3. Nature and Sources of Data for Economic Analysis
  - 1.4. Measurement Scales of Variables
- Unit 2: Simple Regression Analysis** (15 Periods)
- 2.1. Regression: Meaning and Concept, Modern interpretation of regression, Concept of Population Regression Function (PRF) and Sample Regression Function (SRF)
  - 2.2. Method of ordinary least squares (OLS), Properties of OLS estimator: Gauss-Markov theorem, Assumptions of ordinary least squares method
  - 2.3. Coefficient of determination, Method of Maximum Likelihood (ML)
  - 2.4. Estimation, interpretation and testing of the regression coefficients
- Unit 3: Multiple Regression Analysis** (15 Periods)
- 3.1. Multiple Regression: Assumptions, Method of Ordinary Least Squares (OLS)
  - 3.2. Multiple Coefficient of Determination ( $R^2$ )
  - 3.3.  $R^2$  and adjusted  $R^2$
  - 3.4. Interpretation and testing of the coefficients of multiple regression
- Unit 4: Dummy Variable Regression Models** (15 Periods)
- 4.1. Dummy Variables: Meaning and Nature, ANOVA and ANCOVA Models
  - 4.2. Interaction Effects Using Dummy Variables

#### 4.3. Use of Dummy Variables in Seasonal Analysis

#### 4.4. Piecewise Linear Regression

### READING LIST:

1. Amemiya, T. (1985), *Advanced Econometrics*, Harvard University Press, Cambridge, Mass.
2. Baltagi, B. H. (1998), *Econometrics*, Springer, New York.
3. Chow, G. C. (1983), *Econometrics*, McGraw Hill, New York.
4. Croxton, F. E., D. J. Cowden and S. Klein (1973), *Applied General Statistics*, Prentice Hall, New Delhi.
5. Dhrymes, P. J. (1970), *Econometrics – Statistical Foundations and Applications*, Harper and Row Publishers, New York.
6. Dougherty, C. (1992), *Introduction to Econometrics*, Oxford University press, New York.
7. Draper, N. R. and H. Smith (1966), *Applied Regression Analysis*, John Wiley, New York.
8. Franses, P. H. (1998), *Time Series Models for Business and Economic Forecasting*, Cambridge University press, New York.
9. Franses, P. H. (1998), *Time Series Models for Business and Economic Forecasting*, Cambridge University press, Cambridge.
10. Goldberger, A. S. (1998), *Introductory Econometrics*, Harvard University Press, Cambridge, Mass.
11. Green J. (2001), *Econometric Analysis*, Macmillan, New York
12. Gujarati, D. N. (2012), *Basic Econometrics*, McGraw Hill, New York..
13. Hamonda, O. F. and J. C.R. Roley (1997), *Time Series Model, Casualty and Exogeneity*, Cheltenham, U. K.
14. Harvey, A. C. (1981), *Econometric Analysis of Time Series*, Phillip Allen, London.
15. Harvey, A. C. (1981), *Econometric Analysis of Time Series*, Phillip Allen, London.
16. Intrilligator, M. D. (1978), *Econometrics Methods, Techniques and Applications*, Prentice Hall, Englewood Cliffs, New Jersey.
17. Johnston (1984) *Econometrics Methods*, MacGraw Hill, New York
18. Kennedy, P. (1998), *A Guide to Econometrics*, MIT press, New York.
19. Kmenta, J. (1997), *Elements of Econometrics (Reprint Edition)*, University of Michigan Press, New York.
20. Koutsoyiannis, A. (1977), *Theory of Econometrics (2nd ed.)*, the Macmillan Press Ltd., London.
21. Krishna, K. L. (Ed.) (1997), *Econometric Applications in India*, Oxford University Press, New Delhi.
22. Maddala, G. S. (2001), *Introduction to Econometrics*, John Williams and Sons, New York.

23. Pindyck R. S. and Rubinfeld (1998), Econometrics Models and Econometric forecast, Macmillan, New York
24. Theil, H. (1981), Introduction to Econometrics, Prentice Hall of India, New Delhi.

**ECONOMICS OF SOCIAL SECTOR AND ENVIRONMENT**  
**EO –31 (Elective / Optional Paper)**

**PREAMBLE:**

Social services have a special importance, because they directly help in promoting the level of social welfare. Hence it is of vital importance to study the issues relating to social services and welfare. Environmental goods and services are considered as public goods; therefore environment should be studied in the framework social welfare. Economic valuation of the environment is very much necessary to know its role in development as well as social welfare maximisation. Environmental management is of crucial significance for the preservation and protection of the environment. It is therefore the study of Economics of Social Sector and Environment is assumed of greater significance on the number counts. The major intension of this course/paper is to provide knowledge of the important aspects in theory and practice, such as welfare and environment, economic valuation of the environment, optimal use of natural resources and social services like education and health to the students in theory and practice as well.

**UNIT I: WELFARE ECONOMICS AND ENVIRONMENT: (15 Periods)**

**1.1:** Welfare Economics: Fundamental theorems of welfare economics; Pareto welfare optimality conditions

**1.2:** Theory of Externalities: Externalities and market- externalities and market inefficiency – externalities as missing markets – Property rights and externalities.

**1.3:** Theory of Public Goods: Optimal provision of public goods;

**1.4:** Partial and General Equilibrium Analysis – Wicksell and Lindahl model of provision of Public goods

**UNIT II: ECONOMIC VALUATION OF ENVIRONMENT: (15 Periods)**

**2.1:** Meaning and Types of Environmental Values: Total Economic Value, Use value, Non-use Value, Existence value, Option value; Future use value, Bequest value, Vicarious value

**2.2:** Techniques/ Methods of Environmental Valuation: I) Direct Methods: Contingent Valuation Method, Trade off Games Method, Costless Choice Method, Delphi Technique

**2.3:** Indirect Methods: Hedonic Pricing Method,

**2.4:** Travel Cost Method

**UNIT III: ECONOMICS OF NATURAL RESOURCE MANAGEMENT (15 Periods)**

**3.1:** Theories of Optimal Use of Exhaustible and Renewable Resources

**3.2:** Environmental Policy: Polluter Pays Principle (PPPs) – Trade and Environment -Coase's Bargaining Solution and Collective Action

**3.3:** Environmental Accounting: System of Integrated Environmental and Economic Accounting (SEEA)

**3.4:** measurement of Environmentally Corrected GDP &NDP

**UNIT IV: ECONOMICS OF SOCIAL SECTOR: EDUCATION, HEALTH (15 Periods)**

- 4.1: Education as an instrument for economic growth - Demand for and Supply of education
- 4.2: Cost benefit analysis in Education: Costs of Education; private costs and social costs-Benefits of education; Direct and indirect benefits of education, private and social benefits- Financing of Education
- 4.3: Health dimensions of development - Determinants of health - Economic dimensions of Health care -
- 4.4: Demand and Supply of health care –Financing of Health

#### READING LIST:

1. Berman, P. (Ed.) (1995), Health Sector Reforms in Developing Countries: Making Health Development Sustainable, Boston: Harvard Series on Population and International Health.
2. Blaug, M. (1972), Introduction to Economics of Education, Penguin, London.
3. Bromely, D. W. (Ed.) (1995), Handbook of Environmental Economics, Blackwell, London.
4. Cohn, E. and T. Gaske (1989), Economics of Education, Pergamon Press, London.
5. Fisher, A. C. (1981), Resource and Environmental Economics, Cambridge University press, Cambridge.
6. Pearce, D. W. and R. Turner (1991), Economics of Natural Resource Use and Environment, John Hopkins University Press, Baltimore.
7. Perman, R. Ma and J. McGilvary (1996), Natural Resource and Environmental Economics, Longman, London.
8. Sankar, U. (Ed.) (2001), Environmental Economics, Oxford University Press, New Delhi.
- 9) Schultz, T. W. (1971), Investment in Human Capital, Free Press, New York.
9. Tietenberg, T. (1994), Environmental Economics and Policy, Harper Collins, New York.
- 11) Crones, R. and T. Sandler (1989), The Theory of Externalities and Public Goods, Cambridge University press, Cambridge.
10. Murty, M. N., A. James and S. Misra (1999), The Economics of Water Pollution in India, Oxford University press, New Delhi.
11. Dasgupta, P. S. and G. M. Heal (1985), Economic Theory and Exhaustible Resources, Cambridge University press, Cambridge.
12. Kerr, J. M. et. al. (Eds.) (1997), Natural Resource Economics: Theory and Applications in India, Oxford and IBH Publication Co. Pvt. Ltd., New Delhi.
13. Becker, G. S. (1974), Human Capital (2nd Edition), National Bureau of Economic Research, New York.
14. Vaizey, J. (1962), Economics of Education, Faber and Faber, London.
15. Baru, R. V. (1998), Private Health care in India: Social Characteristics and Trends, Sage Publications, New Delhi.
16. Panchamukhi, P. R. (1980), Economics of Health: A Trend Report in ICSSR, A Survey of Research in economics, Vol. VI, Infrastructure, Allied, Delhi.
17. R. N. Bhattacharya (2007), Environmental Economics: An Indian Perspective, `Oxford University Press, New Delhi.
18. Karpagam, M. (1991), Environmental Economics, Sterling Publishers Pvt. Ltd., New Delhi.
- Hanley, Shogren, White (2004), Environmental Economics In Theory and Practice, MacMillan India Ltd., Delhi.

**M.A. Part-II; SEM-IV**

<b>Paper Number</b>	<b>Paper Title</b>	<b>Credits</b>	<b>Marks</b>
<b>(i) CORE / COMPULSORY PAPERS:</b>			
EC-7	<b>International Economics</b>	<b>04</b>	<b>100</b>
EC-8	<b>Economics of Growth and Development</b>	<b>04</b>	<b>100</b>
<b>(II) ELECTIVE / OPTIONAL PAPERS:</b>			
EO-32	Co-operative Thoughts and Administration	<b>04</b>	<b>100</b>
EO-33	Statistics for Economics	<b>04</b>	<b>100</b>
EO-34	Global Business Logistics	<b>04</b>	<b>100</b>
EO-35	Health Economics	<b>04</b>	<b>100</b>
EO-36	Advanced Banking	<b>04</b>	<b>100</b>
EO-37	Welfare Economics	<b>04</b>	<b>100</b>
EO-38	Research Methodology	<b>04</b>	<b>100</b>
EO-39	Econometrics (*) Economic Thoughts of Chh. Shahu Maharaj	<b>04</b>	<b>100</b>
EO-40	Computer Application in Economics II	<b>04</b>	<b>100</b>
EO-41	Economics and Law	<b>04</b>	<b>100</b>
EO-42	Econometrics II	<b>04</b>	<b>100</b>

**INTERNATIONAL ECONOMICS**  
**EC-7 (Compulsory Paper)**

**PREAMBLE:**

The course provides a deep understanding about the broad principles and theories, which govern the free flow of trade in goods, services and capital – both short term and long term – at the global level. Besides, preparing the students about the relevance and limitations of these principles, the contents of the paper spread over different units, lay stress on the theory and nature of the subject which, in turn, will greatly help them to examine the impact of the trade policies followed both at the national and international levels as also their welfare implications at macro level and the distribution of gains from trade to North and South. The major objective of the paper is to train the students about the various issues of trade and likely consequences on income, employment and social standards and possible policy solutions as the world will move into the 21<sup>st</sup> century.

- Unit 1: THEORIES OF INTERNATIONAL TRADE (15 Periods)**
- Absolute Cost Advantage Doctrine of Adam Smith -Comparative Cost Advantage Theory of International Trade by Ricardo- Monetary Expression by
- 1.1.** Taussig – Comparative Cost Theory Applicable to more than Two Goods and two Countries – Opportunity Cost version of Comparative Cost Advantage Theory
- 1.2.** Heckscher- Ohlin Theory of Trade - Leontief Paradox - Theory of economic geography- Krugman.
- 1.3.** Role of dynamic factors, i. e., changes in tastes, technology and factor endowments in explaining the emergence of trade
- 1.4.** Complementary Trade Theories: Linder Theory- Karvis Theory
- Unit 2: GAINS FROM INTERNATIONAL TRADE & THEIR MEASUREMENT (15 Periods)**
- 2.1.** Trade and Economic Growth
- 2.2.** Factors affecting Gains from International Trade - Measurement and Distribution of Gains from trade
- 2.3.** Terms of Trade; Concepts, Factors affecting, Uses & Limitations
- 2.4.** Theory of Reciprocal Demand - Hypothesis of secular deterioration of terms of Trade
- Unit 3: THEORY OF INTERVENTIONS IN TRADE (15 Periods)**
- 3.1.** Free Trade and Protective Trade: Arguments in favour & against
- 3.2.** Barriers to Trade: Tariffs; Meaning- Types – Effects- Optimum Tariff – Effective Rate of Protection/ Tariff



- Barriers to Trade: Non Tariffs; Quotas, Exchange Control, Price
- 3.3.** Discrimination/ Dumping, State Trading, Subsidies, Commodity Agreements, International Cartels – Political Economy of Protection.
- 3.4.** Effects of Tariffs under General Equilibrium, Samuelson Theorem.
- Unit 4: THEORY OF BALANCE OF PAYMENTS AND ECONOMIC INTEGRATION (15 Periods)**
- 4.1.** 4.1 Balance of Payments: Meaning, Structure and Components - Equilibrium and disequilibrium in Balance of Payments  
Balance of Payments Adjustment Mechanisms; I) BOPs Adjustments through Variations in Exchange Rates: Elasticity Approach, Marshall- Lerner
- 4.2.** Conditions, The J –Curve Effect, Absorption Approach, II) Balance of Payments Adjustments through Policy Changes: Traditional Approach, Monetarist Approach, Structuralist Approach -Foreign Trade Multiplier; without Repercussion and with Repercussion Effect
- 4.3.** Economic Integration / Cooperation: Meaning, Forms and Benefits –Theory of Customs Union - Regional Blocks: SAARC, ASEAN- EU.
- 4.4.** Multilateralism and WTO –Conditionality clause of IMF.

#### **READING LIST:**

1. Agarwal, M. R.(1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.
2. Bhagwati, J. (Ed.) (1981), International Trade, Selected Readings, Cambridge University Press, Massachusetts.
3. Brahmananda, P. R. (1982), The IMF Loan and India's Economic Future, Himalaya publishing House, Bombay.
4. Carbough, R. J. (1999), International Economics, International Thompson Publishing, New York.
5. Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
6. Dana, M.S. (2000), International Economics: Study, Guide and work Book, (5<sup>th</sup> Edition), Routledge Publishers, London.
7. Dunn, R. M. and J. H. Mutti (2000), International Economics, Routledge, London.
8. Francis Cherunilum, International Trade and Export Management, Himalaya Publishing House, Delhi.
9. Greenway, D. (1983), International Trade Policy, Macmillan Publishers Ltd., London.

10. Joshi V. and I.M.D. Little (1998), India's Economic Reforms, 1999-2000, Oxford University Press, New Delhi.
11. Kenen, P. B. (1994), The International Economy, Cambridge University Press, London.
12. Kindleberger, C. P. (1973), International Economics, R. D. Irwin, Homewood.
13. Kindleberger, C. P. (1996), A History of Financial Crisis: Manias, Panics and Crashes (3rd Edition), John Wiley and Sons, New York.
14. King, P. G. (1995), International Economics and International Economic Policy : A Reader, McGraw Hill International, Singapore.
15. Krugman, P. R. and M. Obstfeld (1994), International Economics: Theory and Policy, Ienview, Foresman.
16. Manmohan Singh (1964), India's Export Trends and the Prospects for Self-sustained Growth, Oxford University press, New Delhi.
17. Mithani, D.M. ( 1997 ), International Economics , Himalaya Publishing House, Delhi.
18. Mundell, R. (1968), International Economics, The Macmillan Company Ltd., New York.
19. Nayyar, D. (1976), India's Exports and Export Policies in the 1960s , Cambridge University Press.
20. Panchmukhi, V. R. (1978), Trade Policies of India – A Quantitative Analysis, Concept Publishing Company, New Delhi.
21. Patel, S. J. (1995), Indian Economy Towards the 21st Century, University Press, Ltd., India.
22. Pomfret, R. (1996), International Trade: An Introduction to Theory and Policy, Basil Blackwell, Oxford.
23. Rana and Verma ( 2010 ), International Economics , Vishal Publishing Company, Delhi.
24. Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N. J. New York.
25. Satyanarayan, B. (1986), India's Trade with Asia and The Far East Countries, B. R. Pub. Corp., New Delhi. 27
26. Soderstrom, Bo (1991), International Economics, The Macmillan Press Ltd., London.
27. Soloman, R. (1982), The International Monetary System 1945-1981, Harper and Row Publishers, New York.
28. Verma, M. L., (1995), International Trade, Vikas Publishing House Pvt. Ltd., Delhi.

**ECONOMICS OF GROWTH AND DEVELOPMENT**  
**EC -8 (Compulsory paper)**

**PREAMBLE:**

This paper includes the theories of growth and development, social and sartorial aspects of development, importance of agriculture and industry, the rationale and pattern of industrialization in developing countries. The other important issues related to development such as policy environment, infrastructure –linkages, role of international trade, role of monetary and fiscal policies, investment criteria and relevance for planning have been included. This paper deals with the theoretical aspects of the process of growth and development including the role of agriculture and industry as well as the role of the state.

- Unit 1: Economic Growth and Development** (15 Periods)
- 1.1. Concepts of growth and development-Characteristics of LDCs- Indicators of development
  - 1.2. Factors affecting economic growth-Growth models: Harrod- Domar, balanced and unbalanced growth- Solow Model.
  - 1.3. Hicks; optimal savings and Ramsay’s rule; golden rule of accumulation
  - 1.4. AK model
- Unit 2: Theories of Development** (15 Periods)
- 2.1. Classical theory of development: contributions of Ricardo, Karl Marx: theory of social change, surplus value and profit.
  - 2.2. Cobb-Douglas production function- Big push theory- Rosenstein Rodan - Myrdal.
  - 2.3. Critical minimum effort thesis and low income equilibrium trap of Libenstin
  - 2.4. Ranis and Fei Model
- Unit 3: Social and Sectoral Aspects of Development** (15 Periods)
- 3.1. Choice of techniques and appropriate technology and employment
  - 3.2. Terms of trade between agriculture and industry
  - 3.3. Measuring development and development gap – Kuznet curve
  - 3.4. Human Development index and other indices of development and quality of life
- Unit 4: Macroeconomic Policies and Development** (15 Periods)

- 4.1. Role of monetary and fiscal policies in developing countries**
- 4.2. Inclusive Growth- Washington Consensus- Decentralization – Micro level planning**
- 4.3. Review of post-liberalization development performance of India**
- 4.4. Contemporary development problems**

**READING LIST:**

- 1) Adelman, I. (1961), *Theories of Economic Growth and Development*, Stanford University Press, Stanford.
- 2) Barrell, R., G. Mason and M. O. Mahoney (2000), *Productivity, Innovation and Economic Performance*, Cambridge University Press, Cambridge.
- 3) Barrow, R. and X. Sela-I, Martin, *Economic Growth*, McGraw Hill, New York.
- 4) Behrman, S. and T. N. Srinivasan (1995), *Handbook of Development Economics*, Vol. 3, Elsevier, Amsterdam.
- 5) Bhagwati, J. and P. Desai (1970), *India: Planning for Industrialization*, Oxford University Press, London.
- 6) Brown, M. (1966), *On the Theory and Measurement of Technical Change*, Cambridge University Press, Cambridge, Mass.
- 7) Chakravarti, S. (1982), *Alternative approaches to the Theory of Economic Growth*, Oxford University Press, New Delhi.
- 8) Chakravarti, S. (1987), *Development Planning: The Indian Experience*, Clarendon Press, Oxford.
- 9) Chenery, H. and t. N. Srinivasan (Eds.) (1989), *Handbook of Development Economics*, vols. 1 & 2, Elsevier, Amsterdam.
- 10) Chenery, H. B. et. Al. (Eds.) (1974), *Redistribution with Growth*, Oxford University Press, Oxford.
- 11) Dasgupta, P. (1993), *An Enquiry into Well-being and Destitution*, Clarendon Press, Oxford.
- 12) Ghatak, S. (1986), *An Introduction to Development Economics*, Allen and Unwin, London.
- 13) Gillis, M., D. H. Perkins, M. Romer and D. r. Snodgrass (1992), *Economics of Development*, (3rd Edition), W. w. Norton, New York.

- 14) Gimmell, N. (1987), *Surveys in Development Economics*, Blackwell, Oxford.
- 15) Gupta, S. B., (1988), *Monetary Economics: Institutions, Theory and Policy*, S. Chand and Co., New Delhi.
- 16) Hayami, Y. (1997), *Development Economics*, Oxford University Press, New York.
- 17) Higgins, B. (1959), *Economic Development*, W. W. Norton, New York.
- 18) Hirsch, A. O. (1958), *The Strategy of Economic Development*, Yale University Press, New York.
- 19) Hogendorn, J. (1996), *Economic Development*, Addison, Wesley, New York.
- 20) Kahkonen, S. and M. Olson (2000), *A New Institutional Approach to Economic Development*, Vistaar.
- 21) Kindleberger, C. P. (1977), *Economic Development*, (3rd Edition), McGraw Hill, New York.
- 22) Kuznets, Simon (1971), *Economic Growth of Nations, Total Output and Production Structure*, Harvard University Press, Cambridge, Mass.
- 23) Meadows, D. H. et al. (1972), *The Limits to Growth*, Universe Books, New York.
- 24) Meier, G. M. (1995), *Leading Issues in Economic Development*, (6th Edition), Oxford University Press, New Delhi.
- 25) Myint, H. (1971), *Economic Theory and Underdeveloped Countries*, Oxford University Press, New York.
- 26) Myint, Hla (1965), *The Economics of Underdeveloped Countries*, Preager, New York.
- 27) Myrdal, G. (1957), *Economic Theory and Underdeveloped Regions*, Duckworth, London.
- 28) Ranis, G. and A. Mahmood (1992), *Political Economy for Development*, Blackwell, Cambridge Mass.
- 29) Sen, A. (1992), *Inequality Reexamined*, Oxford University Press, Oxford.
- 30) Sen, A. K. (Ed.) (1990), *Growth Economics*, Penguin, Harmondsworth.
- 31) Solow, R. M. (2000), *Growth Theory: An Exposition*, Oxford University Press, Oxford.
- 32) Thirwal, A. P. (1999), (6th Edition), *Growth and Development*, Macmillan, U. K.
- 33) Todaro, M. P. (1996), (6th Edition), *Economic Development*, Longman, London.
- 34) United Nations (1994), *Human Development Report*, United Nations, New York.
- 35) United Nations (1994), *Human Development Report*, United Nations, New York.
- 36) World Bank (1994), *Infrastructure and Development*, World Bank, Washington D. C.

## **CO-OPERATIVE THOUGHTS AND ADMINISTRATION**

### **EO – 32 (Elective Paper)**

#### **PREAMBLE**

Co-operative movement, now-a-days has become a part of total economic activities. It is not only an economic movement, but also social, political and ethical movement, enriching total human life. Proper understanding of co-operative thoughts and administration is a prerequisite for study of co-operative movement.

**Unit 1: Co-operative Thoughts** (15 Periods)

- 1.1. Robert Owen - Rochadale Pioneers-, Charles Fourier - Paul Lambert
- 1.2. Scheultze Delitsche Raiffeisen - Frederick Nicholson
- 1.3. D. R. Gadgil- Vaikunthbhai Mehta.
- 1.4. International Co-operative Alliance: Organization and functions. I.C.A. and Co-operative Principles

**Unit 2: Co-operative Administration** (15 Periods)

- 2.1. Co-operative Management- Concept and Unique Features
- 2.2. Henry Fayol's general principles of management.
- 2.3. Management Structure: Types and procedure of general body meetings- Duties of Board of Directors - & role of Secretary/ Managing Director.
- 2.4. Concept of Corporate Governance.

**Unit 3: Leadership and Human Resource Development** (15 Periods)

- 3.1. Role of leadership – Leadership qualities – Leadership Development Programme.
- 3.2. Contribution of Co-operative Leaders: Vasantdada Patil, Padamshri Vilke Patil, Tatyasaheb Kore
- 3.3. HRD and Education and training Facilities in India- Need and Problems of HRD
- 3.4. Recent Trends in Co-operative Management

**Unit 4: Role of State and Co-operative Audit** (15 Periods)

- 4.1. Role of state in co-operative movement: State aid and State control- Co-operative Legislations and need for reforms.
- 4.2. Co-operative Audit: Concept and Salient Features-Types

**4.3.** Co-operative Supervision: BASEL Norms

**4.4.** Auditor: Duties, rights & responsibilities

**BASIC READING LIST:**

1. Chinchankar, P. Y. and Namjoshi, M. V., Co-operation and dynamics of Change, Somaiya, Bombay.
2. Cole, G. D. H., A Century of co-operation, George Allen and Unwin Ltd., London.
3. Dwivedi, Co-operatives – Values and Identity.
4. E. Paul Roy, Co-operation Today and Tomorrow, Interstate Printers and Publications, U. S. A.
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## STATISTICS FOR ECONOMICS

### EO-33

#### PREAMBLE:

The main objective of this paper is to train the students to use the advanced techniques of statistical analysis, which are commonly applied to understand and analyze economic problems. The emphasis of this paper is on understanding economics with the help of statistical tools. Hence, in this paper a student will be initiated into various economic concepts, which are amenable to statistical treatment.

<b>Unit 1:</b>	<b>Index Numbers</b>	<b>(15 Periods)</b>
1.1.	Index Number: Meaning, Concept, Importance, Characteristics and Uses	
1.2.	Types of Index Numbers and Problems in the Construction of Index Numbers	
1.3.	Methods of Constructing Index Numbers: Unweighted Index Numbers-Simple Aggregative Method, Simple Average of Relatives Method	
	Methods of Constructing Index Numbers: Weighted Index Numbers-	
1.4.	Laspeyers Method, Paasche Method, Dorbish and Bowley's Method, Fisher's Ideal Method, Marshall-Edgeworth Method and Kelly's Method	
<b>Unit 2:</b>	<b>Time Series Analysis</b>	<b>(15 Periods)</b>
2.1.	Time Series: Meaning, Concept, Importance	
2.2.	Components of Time Series	
2.3.	Measurement of Trend-Freehand or Graphic Method, Method of Semi Averages, Method of Moving Averages, Method of Least Squares	
2.4.	Measuring Trend by Logarithms	
<b>Unit 3:</b>	<b>Statistical Inference and Tests of Hypothesis</b>	<b>(15 Periods)</b>
3.1.	Hypothesis Testing-Meaning, Concept, Procedure, Type 1 and Type 2 errors	
3.2.	Goodness of fit; Confidence intervals and level of significance	
3.3.	Tests of Significance for Large Samples	
3.4.	Tests of Significance for Small Samples- Student's t test, Z test and Chi-Square Test	
<b>Unit 4:</b>	<b>Analysis of Variance</b>	<b>(15 Periods)</b>
4.1.	Analysis of variance: Introduction, assumptions and techniques	
4.2.	One-way classification	
4.3.	Two-way classification	
4.4.	ANOVA table; F-test	



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**GLOBAL BUSINESS LOGISTICS**  
**EO – 34 (Elective Paper)**

**PREAMBLE:**

The purpose of this paper is to acknowledge the students about the international trade logistics. There is need to prepare students better for a wide range of employment and self employment opportunities available in this sector. Due to the increasing international trade, there are increasing different opportunities to youth. This course is focused on Global Logistics systems and Supply Chain Management which provide opportunity to learn about same.

- Unit 1: Introduction to Global Logistics (15 Periods)**
- 1.1. Meaning, definitions and significance of global business logistics
  - 1.2. Global Logistics System- Order processing, Warehousing, Inventory control, Transportation, Information monitoring and Facilities
  - 1.3. Forms of Logistics Management-Centralized, Decentralized and Outsourcing, Documentation in Logistics,
  - 1.4. Warehousing- System and Principles of Warehouse Operating, Importance of Warehouses
- Unit 2: International Supply Chain Management (15 Periods)**
- 2.1. Meaning and Objectives of International Supply Chain Management (SCM)
  - 2.2. Principles and Need of Supply Chain Management, Difference Between Domestic and Global Supply Chain Management
  - 2.3. Role of Supply Chain Manager , Supply Chain Decision
  - 2.4. Case study on supply chain management
- Unit 3: Transportation Activity (15 Periods)**
- 3.1. **Important Transportation activities-** Terminal Facilities, Fleet management, Key Movers, Routing, Transit time management, Distribution Pattern, Nature of Product, Asset Tracking
  - 3.2. **Elements of Customer Service in Transportation Activity-** Pre- transaction, Transaction and Transaction,
  - 3.3. **Dimensions of customer services in Transportation-** Availability, Consistency, Cost-effectiveness, Performance, and Reliability etc
  - 3.4. **Freight system-** Meaning, Types of Freight Rate, Factors involved in Ratemaking, Determination of optimum freight rates
- Unit 4: Air and Ocean Transportation (15 Periods)**
- 4.1. **Air Transportation-** Air transportation system in India, The Indian Air cargo Market, Categories of Air Transport Services, Air Freight Rate Classification
  - 4.2. Problems relating to Air Transportation in India, Major Policy Initiatives
  - 4.3. **Shipping Industry -** Classification and Characteristics, Freight Structure and Practices
  - 4.4. **Ocean Transportation-** Concepts of containers, Types of containers, Advantages of containers, Indian container scenario, Problems & prospects of

containerization

**READING LIST:**

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**Health Economics**  
**EO- 35 (Elective Paper )**

**PREAMBLE:**

Health status of the population forms a major variable in measuring the Human Development Index. Health infrastructure provisions both public and private sector assumes significance in the overall health policy of a country. The present paper analyses the national health scene, correlation of health output and input indicators with level of economic development. Resource allocation in the health sector both public and private sector, evaluation of benefits and costs of health services, financing of health services and role of government and institutions also is examined.

**Unit 1: Introduction to Health Economics (15 Periods)**

- 1.1. Role of Health in Economic Development- Role of Health Input and Output Indicators in Economic Development.
- 1.2. Health Dimensions of Development- Determinants of Health- Poverty,

Malnutrition and Environmental Issues.

**1.3** Inequalities in Health: class and gender perspectives with reference to India.

**1.4.** Health Infrastructure: Government and Private.

**Unit 2: Demand and Supply of Health Care Services (15 Periods)**

**2.1.** Nature and Determinants of Demand for Health Care Services.

**2.2.** Elasticity of Demand for Health Care Services.

**2.3.** Nature of Supply of Health Care Services- Health Production Function.

**2.4.** Pricing of health care services.

**Unit 3: Cost -Benefit Analysis of Health Services (15 Periods)**

**3.1.** Private costs and benefits of providing health services- Application of cost-benefit analysis to public health projects.

**3.2.** Provision of Health Services by Government- Market failure in health services

**3.3.** Health Insurance: Need for a special health insurance for the poor, disabled, and the aged.

**3.4.** Health Insurance Policy of government.

**Unit 4: Financing and Planning of Health Services (15 Periods)**

**4.1.** Public expenditure on health care services in India.

**4.2.** Financing health care services - Government, Financial Institutions and Development Finance Institutions.

**4.3.** Delivery of health care services- decentralization and the role of the private-public mix- Health system reforms.

**4.4.** Fourth National Family Health Survey, A review of the Indian National Health Policy since 1991.

#### **READING LIST:**

1. A. J. Culyer and J. Newhouse (2000), Handbook of Health Economics, North-Holland, Amsterdam, (edited volume).
2. Banerjee, D. (1975), Social and Cultural Foundations of Health Service Systems of India, Inquiry, Supplement to Vol. XII, June.
3. Banerjee, D. (1982), Poverty, Class and Health Culture in India, Vol. I Prachi Prakashan, New Delhi.
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6. Gandhian Institute for rural and Family Planning (1972), Studies on Mortality in India, Monograph Series No. 5.
7. Government of India (1983), National Health Policy, New Delhi.
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9. Indian Council of Social Science Research and Indian Council of Medical Research (1981), Health for All 2000 a. D. ICSSR, Delhi.
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**ADVANCED BANKING**  
**EO – 36 (Elective paper)**

**PREAMBLE**

This paper provides detailed information about the Advancement in Indian banking system. Though this paper we intended to aware the students about banking technology, recent trends in banking sector. We also provided the opportunity to the students to achieve as specific skills which are required for working banking sector.

**Unit 1: Banking Technology in India** (15 Periods)

**1.1.** Applications of ICT in Banking, Importance of ICT in Banking, Role of

IDRBT

- 1.2. Internet Banking - Nature, Scope and RBI's Guidelines on Internet Banking
- 1.3. Mobile Banking - Nature, Scope, Mobile Apps, and RBI's Guidelines on Mobile Banking
- 1.4. Electronic Clearing- ECS-Credit & Debit, IMPS, NACH, CTS, BBPS, NFET, RTGS, SWIFT

**Unit 2: Credit and Risk Management in Banks** (15 Periods)

- 2.1. Asset Liability Management - RBI Guidelines - ALCO Guidelines techniques / tools
- 2.2. Capital adequacy , Prudential and Exposure norms, BASEL I, II, III  
Risk in Banking Sector - Credit Risk, Liquidity Risk, Interest Rate Risk,
- 2.3. Market Risk, Operational Risk, Currency Risk and Sovereign Risk, RBI guidelines on risk management
- 2.4. Organization and Functions of ALCO, Case studies on Risk Management

**Unit 3: Banking & Cyber Laws** (15 Periods)

- 3.1. Negotiable Instruments Act 1881 , The Bankers' Books Evidence Act–1891
- 3.2. The SARFEASI Act -2002, Prevention of Money Laundering Act, 2002,  
Meaning and Types of Cyber Crimes in Banking Sector, Information
- 3.3. Technology Act, 2000
- 3.4. Data Security and Importance, Case Studies on Cyber Crimes

**Unit 4: Bank Management Practices** (15 Periods)

- 4.1. Structure and nature of Head office and Regional Offices
- 4.2. Duties and Responsibilities of General Manager and Regional Manager
- 4.3. Structure and staff of the Branch office, Role of Branch Manager
- 4.4. Case Study on functioning of Head office, Regional Office and Branch Office

**READING LIST:**

1. Eddie Cade, Managing Banking Risks, Woodhead Publishing Ltd., in association with The Chartered Institute of Bankers, England.
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11. Vasu Deva, Cyber Crimes and Law Enforcement (2003), Commonwealth Publishers, New Delhi

## **WELFARE ECONOMICS**

### **EO–37 (Elective Paper)**

#### **PREAMBLE:**

Evaluation of normative significance of economic events and issues forms the framework of welfare economics. Many applied branches of economics such as public finance, cost-benefit analysis, industrial economics and economics of government policy use welfare economic criteria as their foundation.

#### **Unit 1: Principles of Welfare Economics (15 Periods)**

- 1.1.** Welfare concept – national income and welfare – Resources use and welfare-optimum Resource Allocation and Welfare Maximization- Problem of income distribution
- 1.2.** Cardinality, comparability and equity in welfare
- 1.3** State and welfare- Impact of Government interference on social welfare-

Welfare economics and policy analysis

**1.4. Privatization, Globalization and Welfare**

**Unit 2: Pre-Paretian Welfare Economics (15 Periods)**

**2.1.** Benthamite Approach to Aggregate Welfare- Assumption of Uniform Income – Utility Function of Individuals- Issue of Interpersonal Comparisons of Utility.

**2.2.** Marshallian Welfare Economics: Consumer's Surplus; Measurement, Difficulties and Criticism- Principles of compensating Variation

**2.3.** Hicks Four Concepts of Consumer's surplus

**2.4.** Consumer's Surplus and Tax-Bounty Analysis.

**Unit 3: Paretian Welfare Economics (15 Periods)**

**3.1.** Pareto optimality – Optimum production, consumption and exchange- Concept of contract curve- Top level optimum- Infinite number of non-comparable optima vs. unique social optimum; Compensation criteria

**3.2.** Contributions of Barone, Kaldor and Hicks

**3.3.** The Scitovsky double criterion- Concept of community indifference map

**3.4.** Samuelson's utility possibility curve- Value judgments and welfare economics- Bergson's social welfare function- Arrow's impossibility theorem.

**Unit 4: Recent Welfare Thoughts (15 Periods)**

**4.1.** Divergence between private and social cost- Problems of non-market interdependence- Externalities of production and consumption- External economies and Diseconomies- Problem of public goods.

**4.2.** Pigovian welfare economics- Second best optima- Marginal cost pricing

**4.3.** Cost-benefit analysis- Interdependent utilities- Dynamic Welfare analysis

**4.4.** Property rights and development policies- fairness theory and distributive justice. Theory of public choice and policy implication- Amartya Sen's contribution to welfare economics

**READING LIST**



1. Arrow, K. J. (1951), Social choice and Individual Values, Yale University Press, New Haven.
2. Baumol, W. J. (1965), Welfare Economics and the Theory of the State (Second Edition) Longmans, London.
3. Baumol, W. J. (Ed.) (2001), Welfare Economics, Edward Elgar Publishing Ltd UK
4. Broadway, R. W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, Oxford.
5. Duesenberry, J. S. (1949), Income, Saving and the Theory of consumer Behaviour, Harvard University Press, Cambridge, Mass.
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7. Graaff J. de V. (1957), Theoretical Welfare Economics, Cambridge University Press, Cambridge.
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14. Samuelson, P. A. (1947), Foundations of Economic Analysis, Harvard University Press, Cambridge, Mass.

## **RESEARCH METHODOLOGY**

### **EO- 38 (Elective / Optional Course)**

#### **PREAMBLE:**

Research has a special relevance in any faculty, stream and area. It is a source of policy inputs for the policy maker and the government also. It is therefore in massive scale research is being carried out in a variety of forms at academic as well as policy level. This

necessitates in understanding concepts and theoretical issues and aspects of research methodology. It is against this over all backdrops, the course / paper of Research Methodology has been introduced at post graduate level. The present course will equip the students with concepts, theoretical issues and framework relating to research methodology.

**Unit 1: INTRODUCTION TO RESEARCH METHODOLOGY (10 Periods)**

- 1.1. Research: Meaning – Objectives - Motivation - Types - Approaches - Significance
- 1.2. Research Methods versus Methodology
- 1.3. Research Process and basic research concepts (facts, concepts, hypothesis, and theory/paradigm/model)
- 1.4. Criteria of Good Research

**Unit 2: RESEARCH PROBLEM AND RESEARCH DESIGN (10 Periods)**

- 2.1. Research Problem: Meaning- Selection – Necessity - Technique Involved
- 2.2. Research Proposal and Design: Meaning - Need
- 2.3. Features of a Good Design - Important Concepts Relating to Research Design
- 2.4. Different Research Designs

**Unit 3: SAMPLING AND DATA COLLECTION (20 Periods)**

- 3.1. Census and Sample Survey - Steps in Sampling Design - Criteria of Selecting a Sampling Procedure, Concept of sample size.
- 3.2. Characteristics of a Good Sample Design - Types of Sample Designs- How to Select a Random Sample?  
Collection of Primary Data: Observation Method, Interview Method,
- 3.3. Questionnaires, Schedules - Difference between Questionnaires and Schedules - Other Methods of Data Collection  
Collection of Secondary Data - Selection of Appropriate Method for Data
- 3.4. Collection - Case Study Method

**PROCESSING & ANALYSIS OF DATA, TESTING OF**

**Unit 4: HYPOTHESES AND INTERPRETATION & REPORT WRITING (20 Periods)**

- 4.1. Data Processing- Scrutiny, Classification, Editing and Tabulation – Problems Elements /Types of Analysis - Statistics in Research: Basic Concept of
- 4.2. Measures of Central Tendency- Dispersion - Regression and Correlation Analysis.

Hypothesis: Meaning - Basic Concepts Concerning Testing -Procedure -

**4.3.** Measuring the Power of a Hypothesis Test - Tests of Hypotheses: Important Parametric and Non Parametric Tests

**4.4.** Interpretation: Meaning - Why- Technique- Precaution -Report Writing: Significance - Steps- Layout - Types - Mechanics -Precautions

#### **READING LIST:**

1. Ackoff, Russell L., (1961 ) The Design of Social Research, Chicago: University of Chicago Press .
2. Ackoff, Russell L., (1962) Scientific Method, New York: John Wiley & Sons.
3. Allen, T. Harrell, (1978) New Methods in Social Science Research, New York: Praeger Publishers.
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5. Anderson, T.W., (1958) An Introduction to Multivariate Analysis, New York: John Wiley & Sons.
6. Bailey, Kenneth D.,(1978) "Methods of Social Research," New York, 1978.
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## **Economic Thoughts of Chh. Shahu Maharaj**

### **EO- 39 (Elective Paper)**

#### **PREAMBLE:**

Rajarshi Chh. Shahu Maharaj of Kolhapur (1894-1922) is considered to be a great king because of his social welfare oriented and production emphatic policies regarding different sectors of the state economy. During his reign spread over 28 years he made balanced efforts to initiate and sustain a process of economic growth coupled with social justice. His thoughts, policies and pogrammes covered areas like infrastructure, agriculture, co-operation, industry, trade, finance, labour, services including education and health. He developed systematic approach to public finances of the state and incorporated important policy decisions resulting into social justice and larger welfare in the broad framework of freedom of policy making and implementation under overall supervision and guidance from the British Govt.

**Unit 1: AGRICULTURE AND CO-OPERATION** (15 Periods)

- 1.1. Broad Policy Framework - its formation - Rajarshi's Approach Towards Agriculture
- 1.2. Major Problems of Agriculture in Rajarshi's Reign - Irrigation and Agricultural Development
- 1.3. Rajarshi's Various Agricultural Experiments in the state - Agriculture Allied Activities
- 1.4. Co-operation in the Kolhapur state -Rajarshi's Role in Co-Operative development - Co-Operative Societies in the Kolhapur state

- Unit 2: INFRASTRUCTURE, INDUSTRY AND TRADE** (15 Periods)
- 2.1. Development of Roads in Rajarshi's Reign – Railway - The Scheme of Radhanagari Dam
  - 2.2. Rajarshi's Role towards Industrial development: Public, Joint, Co-operative and Private Sector Industries during Rajarshi's Reign
  - 2.3. Rajarshi's Industrial Experiments
  - 2.4. Trade in the Kolhapur state during Rajarshi's reign– Development of the markets - Standard Scales, Weights and measures - Loans to Traders - Trade Rule and Banking Service
- Unit 3: SERVICES AND PUBLIC FINANCE** (15 Periods)
- 3.1. Educational Policy of Rajarshi - Primary Education, Secondary and Higher Education, Various Schools - Boarding / Hostel Movement - Female Education
  - 3.2. Health: Plague –Influenza – Vaccination
  - 3.3. Trends in Receipts and Expenditure of The Kolhapur state
  - 3.4. Overall budgetary position in The Kolhapur state
- Unit 4: LABOUR AND FAMINE** (15 Periods)
- 4.1. Rajarshi's Labour policy-Labour Movement during Rajarshi's reign.
  - 4.2. Labour/Workers Training - Labour Social Security
  - 4.3. Famines During Rajarshi's reign - Remedies of famine relief in the Kolhapur state
  - 4.4. Shahu's Development Policy Model

**READING LIST:**

1. Bhagat R.T. – Rajarshi Shahu Chhatrapati Jeevan Va Shikshankary, SiddharajPrakashan, Pune, June 2003.
2. Dhatavkar Bhaskar (Ed.) – Shahu Chhatrapatinche Nivdak Aadesh (Part I), Purabhilekh Vibhag, Maharashtra Shasan Mumbai, 1988.
3. Ghuge V. B. - “Chhatrapati Shahu”'s Revolutionary Ideas and Policies” in the Souvenir – 86<sup>th</sup> Annual Conference of I.E.A, Shivaji University, Kolhapur, Dec. 2003.
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14. Khane B.D. – Shri. Shahu : A Study of Socio Political Reforms (1884-1922), Ph.D. Thesis (unpublished), Shivaji University, Kolhapur, 1978, (p.144).
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## **COMPUTER APPLICATION IN ECONOMICS – II**

### **EO- 40 (Elective Paper)**

#### **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.

- |             |  |                     |
|-------------|--|---------------------|
| <b>Unit</b> | <b>1: Data Processing Concepts</b>   | <b>(15 Periods)</b> |
|             | <b>1.1.</b> Data and Information: Meaning, Types, Data Storage Hierarchy; Data base Concepts                             |                     |
|             | <b>1.2.</b> Data base Management System, Data Base Structuring Techniques, Advantages and Limitations of Database System |                     |
|             | <b>1.3</b> Information Technology in Business: Internet-Intranet-Extranet LAN- MAN-WAN, WWW and E-Mail                   |                     |
|             | <b>1.4.</b> Use of Internet and Search Engines in Research   |                     |
| <b>Unit</b> | <b>2: Text Processing and Spreadsheet Software</b>   | <b>(15 Periods)</b> |
|             | <b>2.1.</b> Introduction to Text Processing  |                     |

**2.2.** Word Processor : Meaning, Uses and Advantages; Popular Word Processing Packages; Features of a Good Word Processor; MS-Word: Getting Started, Creating and Saving a document, Editing, Page Setting and Formatting the text and Printing the Document.

Spreadsheet Software: Meaning, overview and application areas; Features of

**2.3.** MS-Excel: Entering Information; Saving workbooks and Formatting; Creating Graphs; Printing Worksheets and Graphs

**2.4.** SPSS: Data Entry, Define variable, Frequency Distribution, Cross tabulation

**Unit 3: Correlation and Regression** (15 Periods)

**3.1.** Correlation Analysis: Meaning, Concept and Types

**3.2.** Measurement of Correlation: (i) Karl Pearson's Coefficient of Correlation (ii) Spearman's Rank Coefficient of Correlation

**3.3.** Regression Analysis: Types of regression, two lines of Regression Equations- Forecasting

**3.4.** Multiple Linear regression -Forecasting

**Unit 4: Time Series Analysis** (15 Periods)

**4.1.** Time Series Analysis: Meaning, Concept and Utility

**4.2.** Components of Time Series

**4.3.** Measurement of trend and Forecasting: Free hand / Graphic Method, Semi-Average Method

**4.4.** Measurement of trend and Forecasting: Moving Average Method and Method of Least Square-fitting a straight line trend

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**ECONOMICS AND LAW**  
**EO – 41 (Elective paper)**

**PREAMBLE:**

In order to understand the basic tools and methods of economic analysis both at the micro and macro levels, it is imperative to understand the basic provisions of law relating to consumer activities, business organization, land property, custom duties and direct foreign investment. However, economists have often taken for granted the various legal provisions which affect the economic behaviour which is not true. In order to meet this requirement, this course is essential and has been designed in a way that the students of economics would be able to comprehend the basic economic issues affecting the economy along with the related legal provisions. This would enable the economists to frame their models that are closer to reality, besides making them understand the consequences of legal rules, primarily as an exercise in applied microeconomics, macroeconomics, agricultural economics, industrial and international economics with practical and empirical evidences.

**UNIT I: Introduction to Law and Economics: (15 Periods)**

- 1.1:** Interlinking of Law and Economic Activities, Importance of Laws and Rules, Introduction to legal reasoning; Role of courts and lawyers as social engineers
- 1.2:** Nature of a Legal Disputes, Legal Framework and Legal Institutions for Dispute Resolutions.
- 1.3:** Welfare economics; Compensation principles; Social welfare function; Maximization problem;
- 1.4:** Nature of economic reasoning; Economic approach to law – History and criticism.

**UNIT II: Laws Relating to Consumer Activities: (15 Periods)**

- 2.1:** Bargain theory; Economic role of contract; Economic theory of contract; Remedies as incentives, formation, defenses and performance excuses.
- 2.2:** Duress; Bargaining power and unconscious ability;
- 2.3:** Defining tort law, economics of tort liability; tort liability and economic models;
- 2.4:** Economics of accidents, fault, victim; fault and strict liability; Function of damages; Consumer protection; Consumer courts.

**UNIT III: Laws related to Business and Land Property: (15 Periods)**

- 3.1:** Legal Provisions Relating to Business firm – Sole Ownership, Partnership, Holding Company, Corporations, Cooperative firm, Economics of mergers, Amalgamations and takeovers;
- 3.2:** Business Laws : Company Act 2013, The Partnership Act of 1932, MRTTP Act 1970, The Industrial Disputes Act of 1946, Standards of Weights & Measures Act of 1956,

**3.3:** Laws Relating to Land Property- Land Acquisition and Fair Pricing Issues, Land Acquisition- Rehabilitation and Resettlement.

**3.4:** The Urban Land (Ceiling & Regulation) Act, 1976, Real Estate (Regulation and Development) Act, 2016

**UNIT IV: Economic Theory of Criminal Law and International Aspects (15 Periods)**

**4.1:** Economic theory of crime and punishment; Efficient punishment; Efficacy of capital sentence; Addictive drugs and crime; Plea bargaining; Reforms of criminal procedure and futility Thesis;

**4.2:** Law Relating to Economic Offences; Corruption and Human Rights, Cyber Crime and National Cyber Security Policy-2013

**4.3:** GATT/WTO – TRIPS and TRIMS; Export-import policy; Custom Duties;

**4.4:** MNCs and Direct Foreign Investment; FEMA.

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- 22) Lando, H. (1997), 'An Attempt to Incorporate Fairness into an Economic Model of Tort Law', International Review of Law and Economics, Vol. 17.
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## **Econometrics II**

### **EO- 42 (Elective Paper )**

#### **PREAMBLE:**

Applications of economic theory need a reasonable understanding of economic relationships and relevant statistical methods. The econometric theory thus becomes a very powerful tool for understanding of applied economic relationships and for meaningful research in economics. This paper accordingly is devoted to equip the students with basic theory of econometrics and relevant applications of the methods. The course covers various econometric methods those needed for applied economics and applied economic research.

- Unit 1: Violations of Classical Assumptions** (15 Periods)
- 1.1. Multicollinearity: Nature, Sources, Consequences Detection and Remedial measures
- 1.2. Heteroscedasticity: Nature, Reasons, Consequences, Detection and Remedial measures
- 1.3. Autocorrelation: Nature, Reasons, Consequences and Remedial measures
- 1.4. Problem of specification errors
- Unit 2: Dynamic Econometric Models** (15 Periods)
- 2.1. Distributed Lag Models and Autoregressive Models
- 2.2. Lags: Nature and Reasons
- 2.3. Koyck Approach to Distributed- Lag Models and its rationalization
- 2.4. Method of Instrumental Variables (IV), Almon's Approach to Distributed- Lag Models
- Unit 3: Simultaneous Equation Models** (15 Periods)
- 3.1. Simultaneous Equation Bias and Inconsistency of Ordinary Least Squares estimators

- 3.2. Structural and reduced form of simultaneous equation models
- 3.3. Identification problem, order and rank conditions of identification
- 3.4. Methods of estimating simultaneous equation system – recursive method and OLS, Indirect least squares (ILS), 2SLS methods

**Unit 4: Time Series Econometrics** (15 Periods)

- 4.1. Stochastic Processes: Stationary, Non-stationary and Unit root
- 4.2. Stochastic Processes: Trend Stationary, Difference Stationary and Integrated
- 4.3. Spurious Regression, Tests of stationarity, Cointegration
- 4.4. Forecasting –AR, MA, ARMA, ARIMA, VAR models and Box-Jenkin's methodology

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