
 <p>शिवाजी विद्यापीठ कोल्हापूर ज्ञानमेवाधुता</p> <p>Estd. 1962 "A++" Accredited by NAAC (2021) With CGPA 3.52</p>	<p>SHIVAJI UNIVERSITY, KOLHAPUR - 416 004, MAHARASHTRA</p> <p>PHONE : EPABX – 2609000, www.unishivaji.ac.in, bos@unishivaji.ac.in</p> <p>शिवाजी विद्यापीठ, कोल्हापूर - ४१६ ००४, महाराष्ट्र</p> <p>दूरध्वनी - ईपीएबीएक्स - २६०९०००, अभ्यासमंडळे विभाग - ०२३३-२६०९०९४</p>	
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Ref. No./SU/BOS/Humanities/542

Date :19/07/2023

To,

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|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <p>1. The Principal,
All Concerenced Affiliated
Colleges/Institutions,
Shivaji University, Kolhapur</p> | <p>2. The Head,
All Concerenced Department,
Shivaji University, Kolhapur</p> |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|

Subject : Regarding syllabi of M. A. & M.R.S. Part II (sem. III & IV) degree programme under the Faculty of Humanities as per National Education Policy, 2020 (NEP)

Sir/Madam,

With reference to the subject mentioned above I am directed to inform you that the University authorities have accepted and granted approval to the revised syllabi, equivalence and nature of question paper of M. A. & M.R.S. Part II (Sem. III & IV) under the Faculty of Humanities as per National Education Policy, 2020. (NEP)

English	Hindi	Marathi	Sanskrit	History
Sociology	Economics	Political Science	Russian	M.R.S.
Bhasha Proudyogiki	Criminal and Forensic Psychology	Clinical Psychology	Counselling Psychology	Industrial Psychology

This syllabi shall be implemented from the academic year 2023-24 onwards . A soft copy containing the syllabus is attached herewith and it is also available on university website www.unishivaji.ac.in (Online Syllabus).

For students of Distance Education this syllabi be implemented from the academic yerar 2023-24.

You are therefore, requested to bring this to the notice of all students and teachers concerned.

Thanking you,

Yours faithfully


(Dr. S. M. Kubal)
Dy. Registrar

Encl : As above

Copy to,

For Information and necessary action.

Dean, Faculty of Humanities.	Computer Center/I. T. Cell.
Chairman, B.O.S./Ad-hoc Board under faculty of Humanities.	Eligibility Section.
Director, Board of Examinations & Evaluation	P. G. Seminar Section.
Appointment Section A & B	Distance Education Section.
M. A. Exam. Section.	Affiliation Section (T. 1 & T 2)
P. G. Admission Section.	

SHIVAJI UNIVERSITY, KOLHAPUR.



******* A**

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 July 2023 Onwards

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

	Semester –III		Semester –IV
(I)	Core/ Compulsory Papers	(I)	Core / Compulsory Papers
EC-5	Statistics in Economic Analysis	EC-7	International Economics
EC-6	Macro Economic Analysis	EC-8	Economics of Growth and Development
(II)	Elective Papers	(II)	Elective Papers
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)	Credit by Choice / Open Electives Offered by Dept. of Economics	(III)	Credit by Choice / Open Electives Offered by Dept. of Economics
ECO- 3.1	Econometrics I	ECO- 4.1	Econometrics II
ECO- 3.2	Demography	ECO- 4.2	Economic Thoughts of Chh. Shahu Maharaj

Notes:

- EC-1 to EC-8 papers (8 Papers) are core/ compulsory papers.
- 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.
- 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

- a) Maximum Intake Capacity for Other Departments: unlimited students
- b) Maximum Credits for One Paper : 04 credits
- c) Eligibility : Any student admitted to Post Graduate Class of any Department on University Campus
- d) 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. July 2023 for M. A. Part –II (Semester-III & IV) in the Department of Economics, Shivaji University, Kolhapur-4, [Under Academic Flexibility]

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

STATISTICS IN ECONOMIC ANALYSIS

(EC-5)

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 to understand economics with the help of statistical tools.

Course Outcomes: After successful completion of this course, the students will be able to:

1. Explain the importance of statistics in economic analysis.
2. Get acquainted with the basic concepts of statistics and its methodologies.
3. Use various techniques of statistics in economic analysis.
4. Use the statistical techniques in economic research

Unit 1: Introduction of Statistics and Central Tendency (15 Periods)

- 1.1 Statistics: Meaning, Functions, Scope, Importance and Limitations
- 1.2 Central tendency: Meaning, Measurement of central tendency: mean, mode and median
- 1.3 Harmonic Mean and Geometric Mean
- 1.4 Prerequisites of Good Average

Unit 2: Dispersion (15 Periods)

- 2.1 Dispersion: Meaning and Importance
- 2.2 Quartile Deviation and Mean deviation
- 2.3 Standard deviation, Variance and Co-efficient of Variation
- 2.4 Properties of a good measure of dispersion

Unit 3: Correlation Analysis (15 Periods)

- 3.1 Correlation: meaning and importance
- 3.2 Types of correlation: positive and negative correlation- simple, partial and multiple correlation - linear and non-linear correlation
- 3.3 Karl Pearson's coefficient of correlation and Rank coefficient of correlation
- 3.4 Concurrent Deviation Method

Unit 4: Regression Analysis (15 Periods)

- 4.1 Regression: Meaning and Importance
- 4.2 Methods of Estimating Regression: Graphic Study of Regression, Free Hand Curve Method
- 4.3 Least Square Method
- 4.4 Properties of Regression Coefficients and Properties of Regression Lines

References:

1. Gupta S. P. (2016): *Statistical Methods*, Sultan Chand & Sons, New Delhi
2. Monga G. S. (2000): *Mathematics and Statistics for Economics*, Vikas Publishing House, Delhi.
3. Gupta S. C. (2007): *Fundamentals of Statistics*, Himalaya Publishing House, Mumbai.
4. Gupta S. P. and M. P. Gupta (2005): *Business Statistics*, S. Chand and Sons, New Delhi.
5. Hooda R. P. (2007): *Statistics for Business and Economics*, Macmillan Business Books, New Delhi.
6. Chou Ya-Lun (1974): *Statistical Analysis with Business and Economic Applications*, Rinehart and Winston, New Delhi
7. Allen R. G. D. (1974): *Mathematical Analysis for Economists*, Macmillan Press and ELBS, London.
8. Elhance D. N., Veena Elhance and B. M. Agarwal (2015): *Fundamentals of Statistics*, Kitab Mahal, Allahabad.
9. Millar J. (1996): *Statistics for Advanced Level*, Cambridge University Press, Cambridge.
10. Nagar A. L. and R. K. Das (1993): *Basic Statistics*, Oxford University Press, New Delhi.
11. पाटील ज. फा., के. जी. पठाण, पी. जे. ताम्हणकर, आणि एस. बी. यादव (2000): *अर्थशास्त्रीय संशोधन पद्धती*, कॉनटीनेन्टल प्रकाशन, पुणे.
12. देशमुख राम (1993): *मुलभूत सांख्यिकी*, नागपूर.

MACRO ECONOMIC ANALYSIS

EC – 6 (Compulsory Paper)

PREAMBLE:

Macroeconomics or aggregative economic 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.

Course Outcomes: After successful completion of this course, the students will be able to:

- Understand national income accounting and its different forms
- Know the modern macro economics
- Get acquainted with demand for money and supply of money
- Evaluate theories of inflation and business cycle

- 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: Modern Macro Economics (15 Periods)**
- 2.1 Monetarism versus Keynesianism
 - 2.2 IS and LM functions: General equilibrium of product and money markets - Extensions of IS-LM model - Effectiveness of monetary and fiscal policies
 - 2.3 Modern macro economics - The rational expectations hypothesis -supply side economics
 - 2.4 The new classical macroeconomics - New Keynesian economics - policy implications of new Keynesian economics

- Unit 3: Supply of money and 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 (Teaching Hours- 15,)**
- 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. Branson, W. A. (1989): *Macroeconomic Theory and Policy*, (3rd Edition), Harper and Row, New York.

3. Culbertson, J. M. (1968): *Macroeconomic Theory and Stabilization Policy*, McGraw Hill, Kogekosh, Tokyo.
4. Dornbusch, R. and F. Stanley (1997): *Macroeconomics*, McGraw Hill, Inc., New York.
5. Edey, M. and A. T. Peacock (1967): *National Income and Social Accounts*, Hutchinson University Library, London.
6. Frisch, H. (1983): *Theories of Inflation*, Cambridge University Press, Cambridge.
7. Gordon, R. A. (1961): *Business Fluctuations*, Harper and Row.
8. Gordon, R. and S. G. Harris (1998): *Macroeconomics*, Addison Wesley.
9. Hall, R. E. and J. B. Taylor (1986): *Macroeconomics*, W. W. Norton, New York.
10. Heijdra, B. J. and V. Frederick (2001): *Foundations of Modern Macroeconomics*, Oxford University Press, New Delhi.
11. Hicks, J. R. (1950): *A contribution to the Theory of Trade Cycles*, Clarendon Press, Oxford.
12. Jha, R. (1999): *Contemporary Macroeconomic Theory and Policy*, New Age International (P) Ltd., New Delhi.
13. Keynes, J. M. (1936): *The General Theory of Employment, Interest and Money*, Macmillan, London.
14. Levacic, R. and A. Rebman (1986): *Macroeconomics: An Introduction to Keynesian and Neo-classical Controversies*, Macmillan, London.
15. Lucas, R. (1981): *Studies in Business Cycle Theory*, M. I. T. Press, Cambridge, Massachusetts.
16. Mankiw, N. G. and D. Romer (Eds.) (1991): *New Keynesian Economics*, (2 Vols.) MIT Press, Cambridge.
17. Patinkin, D. (1965): *Money, Interest and Prices*, Harper and Row, New York.
18. Powelson, J. P. (1960): *National Income and Flow of Funds Analysis*, McGraw Hill, New York.
19. Rakshit, M. (1998): *Studies in the Macroeconomics of Developing Countries*, Oxford University Press, New Delhi.
20. Romer, D. L. (1996): *Advanced Macroeconomics*, McGraw Hill Company Ltd., New York.
21. Jhingan M. L. (2022): *Macro Economic Theory*, Vrinda Publications (P) Ltd. Delhi.
22. Shapiro, E. (1996): *Macroeconomic Analysis*, Galgotia Publications, New Delhi.

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 captures 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.

Course Outcomes: After successful completion of this course, the students will be able to:

- Understand the Labour economics.
- Get acquainted with various aspects of labor mobility and labor relations.
- Evaluate the complexities and imperfections of labor market.
- Equip with the Indian labor market.

Unit 1: Conceptual Issues

(15 Periods)

1.1 Concept of Labour Force, Determinants of Labour Force Participation

1.2 Employment: Concept and Measurement.

1.3 Unemployment: Types, Causes and Measures.

1.4 Indian Labour Market- Changing Structure and Impact of Globalization

Unit 2: Micro and Macro Approaches in Labour Markets

(15 Periods)

2.1. The theory of labour demand: types of markets- industry demand for labour- Determinants of labour demand

2.2. The theory of supply: Work-leisure choice, Backward-bending labour supply curve and its applications.

2.3. Labour Markets: Rural & Urban, Formal and Informal, Organized and Unorganized, Contract Labour

2.4. Report of Second Labour Commission.

Unit 3: Wage Issues and Policies

(15 Periods)

3.1. Theories of Wages: Subsistence Wage Theory, Standard of Living Theory, Marginal Productivity Theory, Theory of Collective Bargaining, Modern Theory of Wages- Demand and Supply Theory

3.2. Minimum Wage, Living Wage and Fair Wage: Wage Determination under Unorganised Sector, Wage Differentials.

3.3. Micro and Macro relationship between Inflation and Wages - Productivity and Wage Relationship.

3.4. National Wage Policy, Wages and Wage Boards in India, Bonus and Profit Sharing

Unit 4: State and Labour

(15 Periods)

4.1. State and social security of labour: Concept of social security- social assistance and social insurance- 4.2. New Labour Code in India: The code on wages, The Occupational Safety, Health and Working Condition, The code on social security, The Industrial Relation Code.

4.3. International labour standards.

4.4. Labour welfare in India

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.
16. Laffont, J. and Martimort, D. (2002), *The Theory of Incentives : The Principal- Agent Model*, Princeton University Press.
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 Selfemployed 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.

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28. V.K.Puri and A.K.Misra, 'Indian Economy', Himalaya Publishing House, 32nd Revised Edition 2014 153-183, 343-350, 450-456

29. The code on wages, 2019

30. The occupational safety, health and working conditions code, 2019

31. The code on social security, 2020

32. The industrial relations code, 2020

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 analyzes 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 specialize 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 analyze the issues related with tax system, expenditure programmes and debt issues, deficit financing, federal finance, and stabilization instruments

COURSE OUTCOMES: On completion of the course students would be able to:

1. Understand the sources of public finance.
2. Demonstrate the role of government in correcting market failures and advantage of public finance.
3. Understand the possible burden, benefits and distribution of various types of taxes.
4. Analyze the needs for public borrowing

Unit 1: Public Revenue

(15 Periods)

- 1.1. Sources of revenue: Tax and Non-Tax Revenue.
- 1.2. Classification and trends in Tax Revenue
- 1.3 Brief review of tax reforms post 1991
- 1.4. Goods and Service Tax (GST)

Unit 2: Public expenditure and public debt

(15 Periods)

- 2.1. Trends in public expenditure of central and state governments
- 2.2. Analysis of Composition of Public Expenditure
- 2.3. Trends in public debt
- 2.4. Public debt management.

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

- 3.1. Deficit finance: concept and measures. Trend in deficit
- 3.2. Analysis of central and state government's latest budget
- 3.3. Sources of revenue and heads of expenditure of local governments
- 3.4 Fiscal reforms in India : Fiscal Responsibility and Budget Management Act

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

- 4.1. Constitutional provisions of duties and responsibilities and sources of revenue-
- 4.2. 13th and 14th reports of Finance Commissions in India
- 4.3. 15th Finance Commission:
- 4.4. Problem of fiscal imbalance: 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 14th 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.

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.

COURSE OUTCOMES: On completion of the course students would be able to:

1. Understand the Transport and Communication.
2. Get acquainted with various road transports.
3. Equip with the Railway transport.
4. Understand the Water Transport and Air Transport

Unit 1: Introduction of Transport and Communication

(15 Periods)

- 1.1. Meaning of transport – Classification of transportation – Significance of transport – Modes of Transport - Transport and Economic Development.
- 1.2. Meaning of Communication–Classification, Significance and Growth in India
- 1.3. Media – Print, Electronic and social media- Technological development in media-Role of media in economic development
- 1.4. Tele conferencing – Prasar Bharati –Public (BSNL and MTNL) and Private Service Providers
Advertisements in communication – Communication policy of India

Unit II : Road Transport:

(15 Periods)

- 2.1 Nature and significance –Types of Roads- Operational framework of passenger Road transport system in India.
- 2.2 State Road Transport Corporations – Departmental Undertakings-Municipal undertakings
Government Companies

2.3 Road development in India – International Cooperation and road development - National Urban Renewal Mission –National Highways- Inter-state importance- Road development in sensitive boarder areas and tribal roads – Current initiatives in Roadways

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

Unit 3: Indian Railway

(15 Periods)

3.1. Nature and scope of Railway transport: Laws of Returns and Railway transport.

3.2. Indian Railways: Growth of Railway during Pre and Post-Independence period- Railway Electrification

3.3. Mobility of Indian Railway to Passengers: Types of Travel- Convenience and Comfort- Railway Tourism

3.4. Rail Transport Policy: Prizing of Railway Transport Services (Passengers and Goods)– classification of goods- Metro, Mono and Bullet Train- Privatisation of Rail transport - International Cooperation and Rail development.

Unit 4: Water Transport and Air Transport

(15 Periods)

4.1. 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

4.2. 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

4.3. 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

4.4. Nationalization and privatization of air transport. – Problems of Air Transport Recent Developments in Air Transport in India

READING LIST:

1. Aboncher Allan (1976), Transportation Economics and Public Policy with Urban

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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.

COURSE OUTCOMES:

On completion of the course students would be able to

1. Understand the Economic Development and planning
2. Analyze the policies relating agriculture sector
3. Explain the Policy for the development of Micro, Small and Medium Enterprises.
4. Comprehensively interpret of Centre-State financial relations.

Unit1: 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

Unit2: 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.

Unit3: 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

3.2. Policy for the development of Micro, Small and Medium Enterprises (MSMEs); Mudra Policy

3.3. Issues in labour market reforms; exit policy - Insolvency & Bankruptcy Code (IBC) 2016.

3.4. Latest Foreign trade policy 2023-28

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.

READING LIST:

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18. Dandekar. V. M. (1996), The Indian Economy, 1947-92, Vol. II, Sage Publications, New Delhi.
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24. Dhameeja, N. and K. S. Sastry (1998), Privatization: Theory and Practice, A. H. Wheeler, New Delhi.
25. Dubey, M. (1996), An Unequal Treaty: World Trading Order After GATT, New Age International Ltd. Delhi.
26. Frederick, H. and A. M. Charles (1970). Education, Manpower and Economic Growth. New Delhi.

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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.

Course Outcomes:

- 1) Understand basic demographic measures.
- 2) To study established theories of population
- 3) Grasp a clear understanding of the inter-relationship between demography and the process of the economic development.
- 4) To explore various aspects of the population policy and to study its impact on socio economic issues.
- 5) Gain a sound command over the basic tenets of demography as well as key demographic issues and illustrations in the context of a large and diverse country like India.

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 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
- 3.3. rate- levels and trends in more and less developed countries Sex and age pattern of mortality. Sex ratio: Problems and Remedies in India
- 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
- 4.2. Urbanization- Growth and distribution of rural-urban population in India
- 4.3. Study of census in India- Changing characteristics of population in India
- 4.4. Need and Importance of Caste based census in India
Functional Organization of Census of India – Changing characteristics of Population in India – National Population Policy- 2000

READING LIST

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3. Amsden, A. H. (Ed.) (1980), The Economics of Women and Work, Penguin, Harmondsworth.
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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.

Course Outcomes:

1. Understand urbanization and human settlements.
2. Analyze the economics of city size

3. Understand the urban problems.
4. Analyze the urban planning and management

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

READING LIST:

1. Alonso, W. (1965), Location and Land Use, Harvard University Press, Cambridge.
2. Batty, M. (1976), Urban Modelling, Cambridge University Press, Cambridge.
3. Berry B. J. L. and J. Kasarda (1977), Contemporary Urban Ecology, Macmillan, London.
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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 utilization 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.

COURSE OUTCOMES:

1. Understanding basic types and classification of Energy Resources.
2. Acquire Knowledge on Role of Energy in Economic Development.
3. Get knowledge about energy planning and energy crises
4. Analyze the Energy demand - supply and energy policy of India.

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

2.3. Role of International Institutions; OPEC (Organization of the Petroleum Exporting Countries) OAPEC (Organization of Arab Petroleum Exporting Countries)

2.4. 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
Periods)**

(15

- 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

READING LIST:

1. Agarwal, M.C. and Monga, J. R. (1992) Economic and Commercial Geography, (National Publishing House, New Delhi
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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.

Course Outcomes

1. Understand various concepts related computer
2. Get acquainted with hardware, software, memory, computer languages, etc.
3. Use of computer in computation of central tendency and dispersion
4. Get knowledge of handling computer to calculate growth rates

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. Use of Internet, Use of Search Engines

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

READINGLIST LIST:

1. Dhanasekaran. K (2013) Computer applications in Economics, Vrinda Publications Pvt. Ltd.
2. Elhance, D. N. (1962), Fundamentals of Statistics, KitabMahal, Allahabad.
3. Gupta, S. C. (1981), Fundamentals of Statistics, Himalaya Publishing House, Bombay.
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7. Sinha, P. K. (1992), Computer Fundamentals, BPB Publications, New Delhi.
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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.

Course Outcomes

1. Understand the game theory and input-output analysis
2. Learn the application of linear programming
3. Understand the national income determination models
4. Learn various theorems of distribution and consumption

Module 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

Module 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

Module 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

Module 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.

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5. Barro, R. J. and H. Grossman (1976), *Money, Employment and Inflation*, Oxford University Press, Oxford.

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10. Henderson, J. M. and R. E. Quandt (2003), *Microeconomic Theory: A Mathematical Approach*, McGraw Hill, New Delhi.

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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.

Course Outcomes

- 1) Provide an understanding of Econometrics
- 2) Equip students with knowledge required for the estimation of simple linear regression model and providing a basic idea about the multiple regression model.
- 3) Enable to understand the uses of dummy variables.

Unit 1: Basics of 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, 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.
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9. Franses, P. H. (1998), *Time Series Models for Business and Economic Forecasting*, Cambridge University press, Cambridge.
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13. Hamonda, O. F. and J. C.R. Roley (1997), *Time Series Model, Casualty and Exogeneity*, Cheltenham, U. K.
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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. 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:** Concept of Welfare Economics: Fundamental theorems of welfare Economics; Pareto welfare optimality conditions
- 1.2:** 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:** Methods of Environmental Valuation: I) Direct Methods: Contingent Valuation Method, Trade off Games Method, Costless Choice Method
- 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, benefits of 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. Bromely, D. W. (Ed.) (1995), Handbook of Environmental Economics, Blackwell, London.
3. Cohn, E. and T. Gaske (1989), Economics of Education, Pergamon Press, London.
4. Fisher, A. C. (1981), Resource and Environmental Economics, Cambridge University press, Cambridge.
5. Pearce, D. W. and R. Turner (1991), Economics of Natural Resource Use and Environment, John Hopkins University Press, Baltimore.
6. Perman, R. Ma and J. McGilvary (1996), Natural Resource and Environmental Economics, Longman, London.
7. Sankar, U. (Ed.) (2001), Environmental Economics, Oxford University Press, New Delhi. 9) Schultz, T. W. (1971), Investment in Human Capital, Free Press, New York.
8. 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.
9. Murty, M. N., A. James and S. Misra (1999), The Economics of Water Pollution in India, Oxford University press, New Delhi.
10. Dasgupta, P. S. and G. M. Heal (1985), Economic Theory and Exhaustible Resources, Cambridge University press, Cambridge.
11. Kerr, J. M. et. al. (Eds.) (1997), Natural Resource Economics: Theory and Applications in India, Oxford and IBH Publication Co. Pvt. Ltd., New Delhi.
12. Baru, R. V. (1998), Private Health care in India: Social Characteristics and Trends, Sage Publications, New Delhi.
13. Panchamukhi, P. R. (1980), Economics of Health: A Trend Report in ICSSR, A Survey of Research in economics, Vol. VI, Infrastructure, Allied, Delhi.
14. R. N. Bhattacharya (2007), Environmental Economics: An Indian Perspective, `Oxford University Press, New Delhi.
15. 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

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

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 21st century.

Course Outcomes: After successful completion of this course, the students will be able to:

- Understand the theories of international trade.
- Analyze the gains from international trade and their measurement
- Equip with balance of payments and economic integration.

Unit 1: THEORIES OF INTERNATIONAL TRADE (15 Periods)

1.1. Absolute Cost Advantage Doctrine of Adam Smith -Comparative Cost Advantage Theory of International Trade by Ricardo- Monetary Expression by 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 - Rybezynski Theorem

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. Nature and sources of gain - Trade and Economic Growth

2.2. Factors affecting Gains from International Trade – Criteria of Measurement and Distribution of Gains.

2.3. Terms of Trade: Concepts, Factors affecting, Importance & 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

3.3. Barriers to Trade: Non Tariffs; Quotas, Exchange Control, Price 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 Balance of Payments: Meaning, Structure and Components - Equilibrium and disequilibrium in Balance of Payments

4.2. Balance of Payments Adjustment Mechanisms; I) BOPs Adjustments through Variations in Exchange Rates: Elasticity Approach, Marshall- Lerner Conditions, The J –Curve Effect, Absorption Approach, II) Balance of Payments Adjustments through Policy Changes: Traditional Approach, Monetarist Approach.

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, (5th 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.
26. Soderstron, 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.

Course Outcomes: After successful completion of this course, the students will be able to:

- Understand the Economic Growth and Development.
- Analyze Theories of Development
- Equip with Social and Sectoral Aspects of Development.
- Understand the Macroeconomic Policies

Unit 1: Economic Growth and Development (15 Periods)

- 1.1 Basic characteristics of LDCs - indicators of development
- 1.2 Factors affecting economic growth - features of modern economic growth
- 1.3 Models of economic growth: The Harrod- Domar model, Solow's model,
- 1.4 Kaldor model of income distribution - Golden age model - Fei and Ranis model

Unit 2: Theories of Development (15 Periods)

- 2.1 Classical theory of development: contributions of Ricardo, Malthus theory of development - Karl Marx theory of economic development
- 2.2 Low level equilibrium trap - Theory of critical minimum effort - Big push theory

- 2.3 Theory of backwash effects - Theory of balanced growth - Theory of unbalanced growth
- 2.4 Theory of unlimited supplies of labour

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 - Multidimensional Poverty Index

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) Behrman, S. and T. N. Srinivasan (1995): *Handbook of Development Economics*, Vol. 3, Elsevier, Amsterdam.
- 3) Bhagwati, J. and P. Desai (1970): *India: Planning for Industrialization*, Oxford University Press, London.
- 4) Chakravarti, S. (1982): *Alternative approaches to the Theory of Economic Growth*, Oxford University Press, New Delhi.
- 5) Chakravarti, S. (1987): *Development Planning: The Indian Experience*, Clarendon Press, Oxford.
- 6) Chenery, H. B. et. Al. (Eds.) (1974): *Redistribution with Growth*, Oxford University Press, Oxford.
- 7) Dasgupta, P. (1993): *An Enquiry into Well-being and Destitution*, Clarendon Press, Oxford.
- 8) Ghatak, S. (1986): *An Introduction to Development Economics*, Allen and Unwin, London.
- 9) Gillis, M., D. H. Perkins, M. Romer and D. r. Snodgrass (1992): *Economics of Development*, (3rd Edition), W. w. Norton, New York.
- 10) Gimmell, N. (1987): *Surveys in Development Economics*, Blackwell, Oxford.
- 11) Hayami, Y. (1997): *Development Economics*, Oxford University Press, New York.
- 12) Higgins, B. (1959): *Economic Development*, W. W. Norton, New York.
- 13) Hirsch, A. O. (1958): *The Strategy of Economic Development*, Yale University Press, New York.
- 14) Hogendorn, J. (1996): *Economic Development*, Addison, Wesley, New York.

- 15) Kahkonon, S. and M. Olson (2000): *A New Institutional Approach to Economic Development*, Vistaar.
- 16) Kindleberger, C. P. (1977): *Economic Development*, (3rd Edition), McGraw Hill, New York.
- 17) Kuznets, Simon (1971): *Economic Growth of Nations, Total Output and Production Structure*, Harvard University Press, Cambridge, Mass.
- 18) Meier, G. M. (1995): *Leading Issues in Economic Development*, (6th Edition), Oxford University Press, New Delhi.
- 19) Myrdal, G. (1957): *Economic Theory and Underdeveloped Regions*, Duckworth, London.
- 20) Ranis, G. and A. Mahmood (1992): *Political Economy for Development*, Blackwell, Cambridge Mass.
- 21) Sen, A. K. (Ed.) (1990): *Growth Economics*, Penguin, Harmondsworth.
- 22) Solow, R. M. (2000): *Growth Theory: An Exposition*, Oxford University Press, Oxford.
- 23) Todaro, M. P. (1996): (6th Edition), *Economic Development*, Longman, London.
- 24) United Nations (2022): *HDI - MPI Report*, United Nations, New York.

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.

Course Outcomes: After successful completion of this course, the students will be able to:

- Understand the various Co-operative Thoughts.
- Understand the Co-operative Administration / Management
- Equip with Leadership and Human Resource Development
- Understand the Role of State and Co-operative Audit

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

- 2.1 Co-operative Management- Concept and Unique Features
- 2.1. Henry Fayol's general principles of management.
- 2.2. 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
- 3.4. HRD 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.
5. Goel, S. L. & Goel, B. B., Co-operative Administration, Sterling Publications, New Delhi.
6. Gokhale Institute of Politics and Economics, Speeches and Writings of Professor D. R. Gadgil on Co-operation.
7. Govatia, B. S., Verma, H. L. and Others (1994), Co-operatives and Human Resource Development, Vol. 1 to 5, Deep and Deep Publications.
8. I. L. O., Geneva, (1959), Some Trends within the World Co-operative Movement.
9. International Co-operative Alliance: Review of International Cooperation.
10. Kamat, G. S. (1978), New Dimension in Co-operatives, Himalaya Publishing House.
11. Mehta Vaikunthbhai, Towards a Co-operative Socialist Commonwealth.

12. Patnaik and Roy, Co-operation and Co-operative Management, Kalyani Publishers, New Delhi.
13. Saxena, R. K., Evolution of Co-operative Thought, Somaiya Publications, Bombay. 54
14. Stephenson (1978), Management in Co-operatives, Himalaya Publishing House.
15. Taimani, K. K., Co-operative Organisation and Management.
16. Taimani, K. K., Training and Development of Human Resources in Co-operatives, Savin Brothers, New Delhi.

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.

Course Outcomes:

1. Explain the concept and application of index number
2. Carry out time series calculations
3. Apply hypotheses testing
4. Calculate variance

Unit 1: Index Numbers (15 Periods)

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

1.4 . Methods of Constructing Index Numbers: Weighted Index Numbers- Laspeyers Method, Paasche Method, Dorbish and Bowley's Method, Fisher's Ideal Method, Marshall-Edgeworth Method and Kelly's Method

Unit 2: Time Series Analysis (15 Periods)

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

Unit 3: Statistical Inference and Tests of Hypothesis (15 Periods)

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

Unit 4: Analysis of Variance (15 Periods)

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

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 (3rd 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*, Himalay 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 (6th Edition)*, Prentice Hall of India Pvt. Ltd., New Delhi.
19. Yamane, Taro (1975), *Mathematics for Economists*, Prentice Hall of India, New Delhi.

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.

Course Outcomes: After successful completion of this course, the students will be able to:

- Understand the global business logistics.
- Learn International supply chain management.
- Understand the transportation activity
- Analyse the air and ocean transportation.

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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2. Dale Neef (2004). The Supply Chain Imperative, Amacom, 2004
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7. Nandi S. K., Ganapathi S. L.(2015). Logistics Management, Oxford University Press, 2015
8. Osijek Croatia (2015). Business Logistics In Modern Management, Proceedings of The 15th International Scientific Conference
9. Rai Technology University(2016) International Logistics Management, Rai Technology University , Bangalore

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.

Course Outcomes:

1. Understand the Health Economics.
2. Equip with the Demand and Supply for Health Care Services.
3. Understand cost and benefit of health services.
4. Analyse financing and planning of Health services in India.

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.
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4. Feldstein, M. S. (1977), Economic Analysis of Health Service Efficiency, North Holland, Amsterdam.
5. Feldstein, P. J. (1993): Health Care Economics, Wiley (Unit 3)
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.
8. Henderson, J.W.(2001): Health Economics and Policy, South –Western, Thomson(Unit 3)
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. Through 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.

Course Outcomes:

1. Understand the New Banking Technology in India
2. Equip with the Banking & Cyber Laws in India
3. Find out Credit and Risk Management in Banks.
4. Able for online Banking.

Unit I: 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 II: 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
- 2.3 Risk in Banking Sector - Credit Risk, Liquidity Risk, Interest Rate Risk, 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 III: Banking & Cyber Laws

(15 Periods)

- 3.1 Negotiable Instruments Act 1881, New bank Registration Policy 2013.
- 3.2 The SARFEASI Act -2002, Prevention of Money Laundering Act, 2002, Banking Regulation Act 1949
- 3.3 Meaning and Types of Cyber Crimes in Banking Sector, Information Technology Act, 2000 Banking Ombudsman Policy 2006
- 3.4 Data Security and Importance, Case Studies on Cyber Crimes

Unit IV: 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 Customer Relationship Management
- 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.
2. IIBF, Credit and Risk Management, McMillan Publications
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6. S. R. Bhansali, Information Technology Act, 2000 (2003), University Book House Pvt.Ltd., Jaipur
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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.

Course Outcomes:

1. Understand the Principles of Welfare Economics
2. Equip with Pre-Paretian Welfare Economics
3. Understand the Recent Welfare Thoughts

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-
- 1.4 Welfare economics and policy analysis 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-Bounty Analysis . and Tax

Unit 3: Paretian Welfare Economics (15 Periods)

- 2.2 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

- 2.3 Contributions of Barone, Kaldor and Hicks
- 2.4 The Scitovsky double criterion- Concept of community indifference map
- 2.5 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 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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Cambridge.
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Oxford.
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Ltd., U. K.
12. Pigou, A. C. (1962), The Economics of Welfare (4th Edition) Macmillan.
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Economics, McGraw Hill, New York
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Cambridge, Mass.

RESEARCH METHODOLOGY

EO- 38 (Elective Paper)

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.

Course Outcomes: After successful completion of this course, the students will be able to:

- Understand the research methodology and its importance
- Equip with research problem and research design
- Get acquainted with sampling and data collection
- Apply processing, analysis of data, testing of hypotheses and report writing

Unit 1: INTRODUCTION TO RESEARCH METHODOLOGY (10 Periods)

1.1. Research: Meaning – Objectives - Motivation - Types - Approaches - Significance

1.2. Research Methods and Methodology , Research and Scientific Methods

1.3 Research Process and basic research concepts (facts, concepts, hypothesis, and theory/paradigm/model)

1.4. Criteria of a Good Research

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

2.1. Research Problem: Meaning, Selection, Necessity and Techniques Involved

2.2. Research Proposal and Design - concepts

2.3. Important Concepts Relating to Research Designs

2.4. Different Research Designs

Unit 3: SAMPLING AND DATA COLLECTION (20 Periods)

3.1. 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

3.3. Collection of Primary Data: Observation Method, Interview Method, Questionnaire, Schedule - Difference between Questionnaires and Schedules

3.4. Collection of Secondary Data - Methods of Data Collection - Case Study Method

Unit 4: PROCESSING & ANALYSIS OF DATA AND REPORT WRITING (20 Periods)

4.1. Data Processing: Scrutiny, Classification, Editing and Tabulation

4.2. Elements of Analysis - Statistics in Research: Concepts of Measures of Central Tendency-Dispersion - Regression and Correlation Analysis.

4.3. Hypothesis: Meaning - Basic Concepts - Tests of Hypothesis: Important Parametric and Non Parametric Tests

4.4. Report Writing: Significance - Steps- Layout - Types

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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10. Best, John W., and Kahn, James V., (1986) "Research in Education," 5th Ed., New Delhi: Prentice-Hall of India Pvt. Ltd.

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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.

Course Outcomes:

1. Understand thoughts and policies on agriculture and cooperation
2. Examine role in infrastructure, industry and trade development.

3. Analyse contribution in service and public finance.
4. Describe thoughts and policies on labour and famines

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

- 1.1. Broad Policy Framework - Shahu's Approach Towards Agriculture
- 1.2. Major Problems of Agriculture - Irrigation and Agricultural Development
- 1.3. Various Agricultural Experiments - Agriculture Allied Activities
- 1.4. Co-operation in the Kolhapur state - 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 – Railways - The Scheme of Radhanagari Dam
- 2.2. Role towards Industrial development: Public, Joint, Co-operative and Private Sector Industries
- 2.3. Industrial Experiments
- 2.4. Trade in the Kolhapur state – 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 : Primary, Secondary and Higher Education, Various Schools - Boarding / Hostel Movement - Female Education
- 3.2. Health: Plague –Influenza – Vaccination
- 3.3. Trends in Receipts and Expenditure
- 3.4. Overall budgetary position

Unit 4: LABOUR AND FAMINE (15 Periods)

- 4.1. Labour policy-Labour Movement.
- 4.2. Labour/Workers Training - Social Security
- 4.3. Famines - Famine relief work
- 4.4. 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.
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20. More Girish- “Rajarshi Shahu: Vichar Va Karya” Publication, Nirmiti Sanvad Pvt Ltd, Kolhapur, 2013, ISBN- 978-93-82028-22-2
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22. Report on the Industrial Survey of Kolhapur, The education society’s Press, Byculla, Bombay, 1895 (p. 11).
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26. Sangave Vilas (Ed.) - Rajarshi Shahu Chhatrapati Papers, Vol. V to VIII, and Vol IX (unpublished), Shahu Research Institute, Shivaji University, Kolhapur, 1992,1994, 1997 and 2001.

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.

Course Outcomes

1. Understand various data processing concepts
2. Get acquainted with processing and softwares
3. Use of computer in computation of correlation and regression
4. Get knowledge of handling computer to analysis time series

Unit 1: Data Processing Concepts (15 Periods)

1.1. Data and Information: Meaning, Types, Data Storage Hierarchy; Data base Concepts

1.2. Data base Management System, Data Base Structuring Techniques, Advantages and Limitations of Database System

1.3 Information Technology in Business: Internet-Intranet-Extranet LAN- MANWAN, WWW and E-Mail

1.4. Use of Internet and Search Engines in Research

Unit 2: Text Processing and Spreadsheet Software (15 Periods)

2.1. 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.

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

READINGLIST LIST:

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3. Gupta, S. C. (1981), Fundamentals of Statistics, Himalaya Publishing House, Bombay.
4. N. M. Downie and R. W. Heath (1970), Basic Statistical Methods, Harper and Row, New York.
5. Rajaram,V, (1996), Fundamentals of Computers, Prentice Hall of India, New Delhi.
6. Sanders, D. H. (1988), Computer Today, McGraw Hill, New York.
7. Sinha, P. K. (1992), Computer Fundamentals, BPB Publications, New Delhi.
8. Yamane, Taro (1973), Statistics, An Introductory Analysis, Harper and Row (India) and John Weatherhill Inc., Tokyo.

ECONOMICS AND LAW

EO – 41 (Elective paper)

Course Outcomes:

1. Students will be able to understand the basiclaw provisions relating to consumer activities,business organization, land property, custom duties, and foreign directinvestment.
2. Students will be able to examine the laws relating to consumer activities and their implications.
3. Students will be able to evaluate the legal provisions relating to business and land property.
4. Students will be able to get acquainted with the economic theory of crime & punishment and international aspects related to law.

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

- 1.1 Interlinking of Law and Economic Activities, Importance of Laws andRules, Introduction to legal reasoning; Role of Courts and Lawyers associal engineers.
- 1.2 Nature of Legal Disputes, Legal Framework, and Legal Institutionsfor Dispute Resolutions.
- 1.3 Welfare economics; Compensation principles; Social welfare function;Maximization problem;
- 1.4 Nature of economic reasoning; Economic approach to law – Historyand criticism.

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

- 2.1 Bargain theory; Economic role of contract; Economic theory ofcontract; Remedies as incentives, formation, defences, and performanceexcuses.Economics of contract law, Contract enforceability, and defenses.
- 2.2 Duress; Bargaining power and unconscious ability;
- 2.3 Defining tort law, the economics of tort liability; tort liability andeconomic models;
- 2.4 Economics of accidents, fault, victim; fault and strict liability; Functionof 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, MRTP 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 Crime & Punishment and International Aspects (15 Periods)

- 4.1 The Traditional Theory of Criminal Law - Economic Theory of Crime and Punishment – Does Punishment Deter Crime?; Efficient punishment; Efficacy of capital sentence; Addictive drugs and crime; Plea bargaining; Reforms of criminal procedure and utility 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 Foreign Direct Investment (FDI) - Foreign Exchange Management Act (FEMA).

READING LIST

- 1) Bouckaert, B. and G. De Geest (Ed.) (1999), Encyclopedia of Law and Economics, (Volume I to V), Edward Elgar Publishing Ltd., U. K.
- 2) Cooter, R. D. and T. S. Ulen (2000), Law and Economics, (3rd Edition), Addison Wesley, New York.
- 3) Dan-Schmidt, K. G. and T. S. Ulen (Ed.) (2000) Law and Economic Anthology, Addison Wesley, New York.
- 4) Newman, P. (Ed.) (1998), The New Palgrave Dictionary of Economics and Law, Stockton Press, New York.
- 5) Oliver, J. M. (1979), Law and Economics, George Allen and Unwin, London.
- 6) Posner, R. A. (1998), Economic Analysis of Law, (5th Edition), Little Brown, Boston.
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- 8) Real Estate (Regulation and Development) Act, 2016- <http://mhupa.gov.in/writereaddata/1564.pdf>
- 9) Burrows, P. and C. G. Veljanovski (Eds.) (1981), The Economic Approach to Law, Butterworth's, London.
- 10) Coase, R. H. (1993), 'Law and Economics', Journal of Law and Economics, Vol. 36, Chicago.
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- 13) Posner, R. A. (1998), 'Values and Consequences: An Introduction to the Economic Analysis of Law', Chicago Law and Economics Working Paper.
- 14) Simpson, A. W. B. (1996), 'Coase V. Pigou Reexamined', Journal of Legal Studies, Vol. 25.
- 15) Samuels, W. J. (1971), 'Interrelations between Legal and Economic Process', Journal of Law and Economics, Vol. 14, Chicago.
- 16) Zerbe, R. O. (2000), Economic Efficiency in Law and Economics, Edward Elgar Publishing Co., U. K.
- 17) Jain, M. P. (1990), Outlines of Indian Legal History (5th Edition), N. M. Tripathi (P) Ltd., Bombay.
- 18) Spitzer, M. and E. Hoffman (1999), 'A Reply to Consumption Theory, Production and Ideology in the Coase Theory', S. California Law Review, Vol. 53.
- 19) Agarwal, V. K. (2000), Bharat's Consumer Protection (Law and Practice), (4th Edition), B. L. H. Publishers Distributors Pvt. Ltd., New Delhi.
- 20) Ayres, I. and R. Gartner (1989), 'Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules', Yale Law Journal, Vol. 99.
- 21) Friedman, D. (1989), 'The Efficient Breach Fallacy', Journal of Legal Studies, Vol. 18.
- 22) Kaplow, L. and S. Shavell (1996), 'Property Rules versus Liability Rules: An Economic Analysis', Harvard Law Review, Vol. 109.
- 23) Lando, H. (1997), 'An Attempt to Incorporate Fairness into an Economic Model of Tort Law', International Review of Law and Economics, Vol. 17.
- 24) Polinsky, M. A. and S. Shavell (1998), Punitive Damages: An Economic Analysis, Harvard Law Review, Vol. 111.

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.

Course Outcomes

- 1) Understand the violation of classical assumptions and its remedial measures.
- 2) Get acquainted with dynamic econometric models
- 3) Get knowledge of simultaneous equation models
- 4) Use the various techniques to analyze time series

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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23. Draper, N. R. and H. Smith (1966), Applied Regression Analysis, John Wiley, New York.
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