Pt. Ravishankar Shukla University
Raipur (C.G.), India 492010

Curriculum & Syllabus
(Based on CBCS & LOCF)

M. A. Economics
(Semester System)

Semester: I - IV

Session: 2025-27

टीप :– सत्र 2024–26 के पाठ्यक्रम को सत्र 2025–27 के लिए यथावत प्रभावशील किया जाता है।

Approved by:

Board of Studies	**: Economics**
Date	: 15-05-2025
Name of Chairman	**: Dr. B.L. Sonekar**
Name of Member's	: Dr. Ravindra Bramhe
	Dr. Neelam Agrawal *(Online Present)*
	Dr. Archana Sethi
	Dr. Sanjay Sharma
	Dr. Sunil Kumeti
	Dr. Shashi Kiran Kujur *(Online Present)*
	Dr. Vineet Kumar Sahu *(Online Present)*
	Dr. Raj Kumar Nagwanshi *(Online Present)*
	Ku. Deepa Devi

M. A. Economics

Introduction:

The Master of Arts in Economics program is a two-year, four-semester program designed to provide students with a comprehensive understanding of advanced economic principles and their applications. Program provides highly demanded skills in economic analysis and policy for students seeking jobs in the public or private sector as well as prepares the academically oriented student to excel in PhD studies. The programme aims to produce successful and competent professionals with socially responsible citizens. At post graduate level, candidates are required to study 15 papers in first, second and third semester (5 papers in each semester) and 04 papers in forth semester examination. This is to be treated as the nineteen papers of the course structure. So, there shall be 19 papers in the post graduate examination in Economics. Viva-voice examination be treated as a compulsory paper for M.A. forth semester examination. Each paper shall carry 100 marks out of which 80 marks will be for theory paper and 20 marks for internal assessment. There shall be 2000 marks in M.A. in Economics and Candidates shall have secure 36 percent marks in aggregate of all papers in order to pass the M.A. examination. Examination and result shall be treated according to rules and regulations of ordinance no. 13.

Program Outcomes:

Upon successful completion of the two- year programme of Master of Arts in Economics, students will be able to:

PO-1	**Knowledge:** Develop academic, comprehensive, fundamental and theoretical knowledge of economic theories. It helps students to apply knowledge of economics for team building and create entrepreneurial initiatives for livelihood and social development.
PO-2	**Critical Thinking:** Develop cognitive skills to analyse the economic problems, understand the events and carry out investigation to evaluate various policies adopted to address socio-economic issues by giving their own suggestions.
PO-3	**Analytical Skill:** Econometric methods, optimization, equilibrium, comparative statics, economic incentives, diagrams, equations and explanations will equipped students in analytical techniques of identify, compile, interpret and analyse quantitative economic data.
PO-4	**Practical Application:** Applying analytical, critical, and quantitative skills in specialized areas to make decisions in everyday life as an individual, member and team.
PO-5	**Communication:** Demonstrate effective communication skill by applying economic concepts and economic ideas that states assumptions and hypotheses supported by evidence to real world situations in oral, written, graphical and technological means in their day-to-day life.
PO-6	**Leadership:** Develop leadership qualities that promotes team work to lead others and will make them to lead diverse audiences and situations in multidisciplinary environment.
PO-7	**Quantitative Reasoning:** Access all relevant statistical and mathematical tools based on economic principles. and will be able to write & visualise primary and secondary sources of information, interpret concepts and data from a variety of sources in developing disciplinary and interdisciplinary analyses.

PO-8	**Interdisciplinary Knowledge and Global Consciousness:** Multidisciplinary knowledge and global competencies, will enhance students understanding of the world around them both within economics and beyond.
PO-9	**Ethical Values**: Develop ethical and responsible conduct in Economics and aware them to become rational & enlightened citizen so that they can responsible and committed toward development and upliftment of society.
PO-10	**Education & Employability:** Knowledge & skills will help them to engage for further academic pursuits in economic fields and make them fit to be professional, self-employed or an academician, researcher, officer, manager, administrator in different private and government sectors.
PO-11	**Public policy analysis:** understand the impact of government policies relating to taxation, price controls, subsidies, innovation and intellectual property, labour laws, efficiency and so on.

Programme Specific Outcomes (PSOs):

At the end of the program, the student will be able to:

PSO1	Develop students understanding about how market for goods and services function and how income is generated and distributed.
PSO2	Understand how economics work and how economists think to solve economic problems related to human issues.
PSO3	Apply theories, models, and tools of Economics to analyse socio-economic issues and develop own thinking /opinion regarding current national or international policies and issues.
PSO4	Explore and engage in IT tools and software for research skills to analyse problems, formulate a hypothesis, evaluate and validate results and draw reasonable conclusions thereof.

M. A. Economics

Specification of Course	Semester	No. of Courses	Credits
Core	I - IV	16	80
Elective	III - IV	04	20
Total		20	100
Additional Courses (Qualifying in nature, for Student admitted in School of Studies only)			
Generic Elective	II - III	02	04
Skill Enhancement (Value Added Courses)	I - IV	02	04

M. A. Economics

PROGRAMME STRUCTURE

Semester	Course Nature	Course Code	Course Title	Course Type (T/P)	Hrs/ Week	Credits	Marks		
							CIA**	ESE*	Total
Semester-I	Core	ECO110	Micro Economics I	T	6	5	30	70	100
	Core	ECO120	Macro Economics I	T	6	5	30	70	100
	Core	ECO130	Quantitative Methods	T	6	5	30	70	100
	Core	ECO140	Indian Economy	T	6	5	30	70	100
	Core	ECO150	Public Finance	T	6	5	30	70	100
Semester-II	Core	ECO210	Micro Economics II	T	6	5	30	70	100
	Core	ECO220	Macro Economics I	T	6	5	30	70	100
	Core	ECO230	Research Methodology & Computer Application	T	6	5	30	70	100
	Core	ECO240	Indian Economic Policy	T	6	5	30	70	100
	Core	ECO250	Public Economics	T	6	5	30	70	100
Semester-III	Core	ECO310	Economics of Growth	T	6	5	30	70	100
	Core	ECO320	International Trade	T	6	5	30	70	100
	Core	ECO330	Environmental Economics	T	6	5	30	70	100
	Elective-1 (Select any one)	ECO340	. Industrial Economics . Labour Economics	T	6	5	30	70	100
	Elective-2 (Select any one)	ECO350	. Demography . Mathematical Economics	T	6	5	30	70	100
Semester-IV	Core	ECO410	Economics of Development and Planning	T	6	5	30	70	100
	Core	ECO420	International Economics	T	6	5	30	70	100
	Core	ECO430	Economics of Social Sector	T	6	5	30	70	100
	Elective-1 (Select any one)	ECO440	. Agriculture Economics . Econometrics	T	6	5	30	70	100
	Elective-2 (Select any one)	ECO 450	. Project (P) . Money & Banking (T)	P	6	5	30	70	100

*** End Semester Exam ** Course Internal Assessment**

*** Internship will be after second semester which will be reflect to third semester result.**

Generic Elective Courses:

(Offered to PG students of other Departments/SoS only)

Semester	Course Code	Course Title	Course Type (T/P)	Hrs/ Week	Credits	Marks		
						CIA	ESE	Total
II	ECO510	Basic Concept of Economics	T	2	2	30	70	100
III	ECO520	Indian Economy	T	2	2	30	70	100

Skill Enhancement/Value Added Courses:

(Offered to the PG students of SoS in Economics)

Semester	Course Code	Course Title	Course Type (T/P)	Hrs/ Week	Credits	Marks		
						CIA	ESE	Total
I	ECO610	Indian Knowledge System: Indian Economic Thought	P	4	2	30	70	100
IV	ECO620	Data Analysis Using SPSS	P	4	2	30	70	100

M. A. Economics Semester – I

Programme	Subject	Year	Semester
M.A.	Economics	1st	I
Course Code	**Course Title**		**Course Type**
ECO110	Micro Economics I		Core
Credit	**Hours Per Week**		
	T		**P**
5	6		0
Maximum Marks	**CIA****		**ESE***
100	30		70

*** End Semester Exam, ** Course Internal Assessment**

Learning Objective:

The course aims to help student in learning the core economic term and theoretical understanding of the core theories elated to behaviour of consumer, producer, market in decision making on the allocation of resources.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to understand the basic principle of equilibrium, economic models, theories of demand and supply.
CO2	Understand the theory related to production, different types of production function &Theories of long run and short run production function.
CO3	Able to understand the various types of cost, theories of cost and revenues
CO4	Able to understand the different markets and their mechanism.
CO5	Able to explain the price and output determination, equilibrium and group equilibrium in different markets.

Detailed Syllabus:

Unit No.	Topics
I	Introduction: - Concept of Equilibrium, Economic Models, Neo Classical Demand Analysis. Elasticity of Demand (Price, Income & Cross), Elasticity of supply.
II	Indifference curve, Marginal Rate of Substitution, Income & substitution effect, Hicks and Slutsky theorem, Revealed preference theory, Hicks's Revision of Demand, Hicksian Consumer surplus.
III	Theory of Production – Production function, the short period & long period production, function, the law of variable proportion (Iso-quant approach) Marginal rate of Technical Substitutions, Returns to a factor and returns to scale. Expansion path, Cobb Douglas Production function, CES production function.
IV	Theory of cost and Revenue analysis, Perfect Competition- equilibrium of firm in Perfect Competition. Monopoly- short run and long run equilibriums, price discrimination under monopoly competition, monopoly control and regulation. Comparison between monopoly and perfect competition.

V	Monopolistic Competition– price and output determination under monopolistic competition, Group equilibrium, theory of excess capacity. Oligopoly, non-collusive oligopoly model: The kinked demand curve. The collusive oligopoly – Cartels: joint profit maximization or perfect cartels, price leadership: the low-cost price leadership model.

Text Books:

1. Jhingan M. L. (2014), Advanced Economic Theory, Vrinda Publication, New Delhi
2. Jhingan M. L. (2014), Micro Economics, Vrinda Publication, New Delhi
3. Agarwal, A (2014), Micro Economic analysis, Sahitya Bhawan Publication, New Delhi

Reference Books:

1. Kraps, David M. (1990) a course in micro economics theory, Princeton university press, Princeton.
2. Koutsayiannis, A (1979) modern Microeconomics (2nd Edition), Macmillan press, London.
3. Layard, PRG and P.W. Watters (1978), Micro economic theory, McGraw Hill, New York.
4. San A (1999) Micro economics theory and Applications, Oxford University Press, New Delhi;
5. Stigler, G. (1996) theory of Price (4th edition), Princeton Hall of India, New Delhi.
6. Varian, H (2000) Micro economics Analysis, W.W. Norten, New York.
7. Baumol W.J., (1982) Economic theory and operations Analysis, Princeton Hall of India New Delhi.
8. Handersan, J.M. and R.E. Quandy (1980) Micro economics theory - A Mathematical approach, Mc Graw Hill New Delhi.
9. Hirshleifer, J. And A Glazer (1997), Price theory and Application, Prentice Hall of India, New Delhi.

M. A. Economics Semester – I

Programme	Subject	Year	Semester
M.A.	Economics	1st	I
Course Code	**Course Title**		**Course Type**
ECO120	Macro Economics I		Core
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course helps student in learning and understanding major issues as the arise in the field of macroeconomics understand alternative approaches to modelling consumption and investment and critically evaluate the usefulness of macroeconomic technique.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to understand the different sectors of economy, concept of National income, different forms national accounting& its methods of measurement.
CO2	Understand the various theories of employment and able to compare Classical and Keynesian theories.
CO3	Understand the concept of consumption function and able to explain various theories related to consumption in the economy.
CO4	Able to explain the concept of Investment function, working of multiplier, various forms of money and their supply in the economy.
CO5	Able to Understand & explain the various theories related to demand for money in the economy.

Detailed Syllabus:

Unit No.	Topics
I	National Income and Accounts – Concept of National Income and National Product, Problems of Measurement, Different forms of National Income Accounting – Social Accounting, Input Out-put Accounting, Flow of Funds, Balance of Payment – Accounting. Circular flow of Income – Two, Three and Four Sector Economy
II	Classical Theory of Employment, Say's Law of Market, Principle of Effective Demand, Keynesian & Pigou Theory of Employment, Comparison of Classical and Keynesian Models. National Income Determination of Keynesian Model - Two, Three and Four Sector Economy.
III	Consumption Function- Keynesian Psychological Law of Consumption, Short Run and Long Run Consumption Function. Theory of Consumption Function – Absolute Income Hypothesis, Dusenbery's Relative Hypothesis, Life Cycle and Permanent Income Hypothesis.
IV	Investment Function, Marginal Efficiency of Capital and Investment. Saving and Investment Equality, Multiplier and its working, Accelerator and its working, Super-

	Multiplier. Supply of Money, Determinants of Money Supply, Measurement of Money supply, Control of Money Supply. High Powered Money, Money Multiplier. The Liquidity theory of Money.
V	Demand for Money –Fisher and Cash Balance (Cambridge) Approach, Fundamental Equation of Keynes. Friedman, re-formulation of the quantity theory of money, Post Keynesian Approach to Demand for Money- Patinkin, Bamouls, James Tobin, Friedman, and Gurley & Shaw's Approaches.

Text books:

1. Sethi, T. T. (2008) Macroeconomics, Laxminarayan Agrawal, Agra.
2. Jhingan, M. L. (2010) Monetary Economics, Vrinda publications Pvt. Ltd.
3. Jhingan, M. L. (2000) Macro Economic theory, Vrinda publications Pvt. Ltd.
4. Shinghai G. C. & Mishra J. P. (2013) Macroeconomic Analysis, Sahitya Bhawan Publication Agra.

Reference Books:

1. Blackhouse, R. and A. Salansi (Eds.) (20()), Macroeconomics and the Real World (2 vol.) Oxford University Press, London.
2. Branson, W.A. (1989), Macroeconomics Theory and Policy, (3rd Edition), Harper and Row, New York.
3. Aornbusch, R and F. Stanley (1997), Macroeconomics, McGraw Hill, inc., New York
4. Hall, R.E. and J.B. Taylor (1986), Macroeconomics, W.W>Norton, New York.
5. Heijdra, B.J. and V.P. Frederick (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
6. Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd. New Delhi.
7. Romer, D.L. (1996), Advanced macroeconomics, McGraw Hill Company Ltd., New York.
8. Scarte, B.L. (1997), Cycles, Growth and inflation, McGraw Hill, New York.
9. Markeley, G. (1978), Macroeconomics Theory and Policy, Macmillan, New York.

M.A. Economics Semester – I

Programme	Subject	Year	Semester
M.A.	Economics	1st	I
Course Code	**Course Title**		**Course Type**
ECO130	Quantitative Methods		Core
Credit	**Hours Per Week**		
	T		**P**
5	6		0
Maximum Marks	**CIA**		**ESE**
100	30		70

Learning Objective:

The aim of this course is to develop mathematical approach & techniques which are directly useful in analysis of economic problems. With the help of economic examples students are train to use the techniques of mathematical and statistical analysis, which are commonly applied to understand and analyse economic problems.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to understand the problem of skewness and learn the measurement of correlation.
CO2	Able to solve the economic problems related to regression analysis.
CO3	Able to understand and solve the problem related to association of attributes.
CO4	Able to apply the concept of probability, permutation and combination in solving economic problems.
CO5	Able to learn the concept the index numbers, time series analysis and their applicability in economics.
CO6	Able to understand the basics of mathematical concept of function, differentiation, integration and how to use in economic problems.

Detailed Syllabus:

Unit No.	Topics
I	Skewness – Symmetrical and asymmetrical distribution, Measurement of skewness – Karl Pearson's coefficient of skewness, Bowley coefficient of skewness. Simple correlation - Measurement of correlation - Karl Pearson's coefficient of correlation and Spearman's rank correlation, Calculation of coefficient of correlation in a bivariate frequency distribution, Coefficient of correlation by the method of least square, Probable error and standard error in correlation, Coefficient of determination of correlation.
II	Regression analysis – regression and correlation, types of regression, regression lines and correlation, Regression equations. Simple regression analysis, regression equation through least squares, Determination of correlation by regression coefficients, Multiple regression analysis (up to three variables only). Standard error of the estimates of simple and multiple regression analysis. Inter potation and extrapolation: Method of fitting a parabolic curve, Newton's advancing difference method, Direct binomial expansion method and Lagrange's method.

III	Association of Attributes – Meaning, classification and types of association, difference between association and correlation, Consistency of data, Methods of determining association – Method of comparison of proportion, Coefficient of association using Yule's method. Probability: Meaning and definition, Possibility chart, Permutation and combination, Types of events, Measurement of probability– Addition and multiplication theorem, Conditional probability
IV	Index Number: Meaning and characteristics of Index number, Fisher's ideal index number, Reversibility Test – Time reversibility test & factor reversibility test. Time series Analysis – Components of time series, Measurement of long-term trend- semi-average method, Moving average method and method of least squares.
V	Functions: Meaning and types of functions, Differentiation: Meaning and rules of differentiation, Integration: Meaning and rules of integration, Problems related to differentiation and integration, Auto correlation.

Text Books:

1. Shukla, S. M. and S. P. Sahay, "Quantitative Methods", Sahitya Bhawan Publications, Agra.
2. Agrawal, D. R., "Quantitative methods". Vrinda Publications (P) Ltd, Delhi.
3. Sancheti, D. C., "Quantitative Methods" Sultan Chand and Sons, New Delhi.
4. Gupta, S.P. and others, "Quantitative Techniques" Sultan Chand and Sons, New Delhi.
5. मेहता एवं मदनानी, 'अर्थशास्त्र में प्रारंभिक गणित', लक्ष्मीनारायण अग्रवाल, आगरा–3.
6. Gujarati, Damodar N, "Basic Econometrics", McGraw Hill Education Pvt. Ltd. Chennai.

M.A. Economics Semester – I

Programme	Subject	Year	Semester
M.A.	Economics	1st	I
Course Code	**Course Title**		**Course Type**
ECO140	Indian Economy		Core
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The aim of this course is to learn the pre and post development of Indian economy, growth phases and economic planning. Students will understand the development of various sectors of economy and their contribution in economic growth of India.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to understand the issues and challenges of development of Indian economy.
CO2	learn the concept of national income and their components & methods of calculation
CO3	Understand the demographic profile of India & Chhattisgarh and their relationship.
CO4	Able to explain the agriculture development in India.
CO5	Able to explain the health economics and important concept related to health economics.
CO6	Able to understand the term infrastructure and social sector and explain the contribution of energy, power, transportation, education, human capital etc. in the economic development of India.

Detailed Syllabus:

Unit No.	Topics
I	Indian Economy: Meaning, basic characteristics and major issues of development of Indian Economy, GDP and National Income of India – Components and Structure of GDP, Role of Primary, Secondary and Tertiary Sectors in GDP, National Income and Per Capita Income, Growth Rates of GDP and Per Capita Income
II	Demographic Features of India – Size, Growth Rate, Sex Ratio, Age-Composition, Literacy and Density of Population, Migration, Rural-Urban Migration, Urbanization and Civic Amenities, Occupational Structure, National Population Policy, Demographic Features of Chhattisgarh State.
III	Agricultural Economics – Agricultural Growth and Productivity, Causes of Low Productivity and Measures to Increase it, Agricultural Marketing and Warehousing, Institutional Structure- Land Reforms in India, The Green Revolution, National Agricultural Policy and Food Security in India, Rural credit in India, NABARD and its role in rural credit.
IV	Health economics: Basic concepts; definition and dimensions of health [WHO definition], meaning and importance of health economics, determination of health – input and output indicators of health. Health as investment- Economics of public

	health, Education and Health – concept of health education capital formation in health care. Health in developing countries – significance of health in LDCs – measuring the burden of disease- the concept of DALYs and QALYs – challenges for the future
V	Infrastructure and Social Sector - Infrastructure and Economic Development, Energy, Power, Transportation-Road, Railway, Water and Civil Aviation in India. Concept of Social Sector and Social Infrastructure, Education; investment in Human capital, rate of return to education; private and social; quality of education; signalling or human capital; theories of discrimination; gender and caste discrimination in India. Education sector in India: An overview literacy rates, school participation, school quality measures.

Reference Books:

1. Ahulwalia, I. J. and I. M. E. Litle (Eds.) 1999): India's Economic Reforms and Development (Essay honour of Manohar Singh), Oxford University Press, New Delhi
2. Bardhan, P. K. (9th Edition) (1998): The Political Economy of Development India, Oxford University Press, New Delhi.
3. Bawa, R.S. and Raikhy (Ed.) (1997): Structural Change in Indian Economy, Guru Nanak Dev University Press. Amritsar (PB).
4. Brahmananda, P. R. and V. R. Panchmukhi (9th Eds.) (2001): Development Experience in the Indian Economy: Interstate Perspectives, Bookwell, Delhi.
5. Chakravarty, S. (1987): Development Planning: The Indian Experience, Oxford University Press, New Delhi.
6. Dantwala, M. L. (1996): Dilemmas of Growth: The Indian Experience, Sage Publication, New Delhi.

M.A. Economics Semester – I

Programme	Subject	Year	Semester
M.A.	Economics	1st	I
Course Code	**Course Title**		**Course Type**
ECO150	Public Finance		Core
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

This course aims to help students in understanding and analysing the impact of public policy on the allocation of resources and the distribution of income in the economy and also able to analysis of public expenditures, public revenue, taxation, budgetary procedures, stabilization instruments, debt issues etc.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to define nature, scope & role of public finance in developing Countries and understand the objective, principles, canons & incidence of taxation
CO2	Students will able to explain the meaning, scope, forms and canons of public expenditure. It will help to explain the structure, growth and trends of public expenditure in India.
CO3	Students will able to explain the meaning, classification, sources and effects of public revenue and able to understand the possible burden, benefits and distribution of various types of taxes, use them to suggest good and bad tax system.
CO4	Understand the needs of public borrowing, different sources to meet necessary public investment/expenditures and student will able to explain principles of Public Debt Management.
CO5	Able to understand and explain the preparation of budget and how they are passed in the house. Understand the changes in size and flexibility of state and central budget along with the role played by Finance Commission.

Detailed Syllabus:

Unit No.	Topics
I	Definition, Nature and scope of Public Finance, Role of Public Finance in Developing Countries, Principles of Maximum Social Advantages. Taxation – features of good tax system, Objectives of Taxation, Principles of Taxation, canons of Taxation, Shifting, Effects and Incidence of Taxation. Impact of Tax under Laws of Returns and Perfect Competition.
II	Public Expenditure: - Meaning and Scope, Different Forms of Expenditure, Canons of Public expenditure, Structure and Growth of Public Expenditure in India. Trends in Central Government Expenditure. Economic Effects of Public Expenditure on Production and Distribution. Public Expenditure and Economic Growth.

III	Public Revenue: - Meaning, classification, sources, principles and effects of public revenue. Classification of taxation: - Indirect & Direct Tax, Goods and Service Tax (GST) New Direct tax, Central Excise, Custom Duties, Taxes on Land and Agriculture, Value Added Tax, MODVAT, Service Tax, Taxable Capacity.
IV	Public Debt – Meaning and Objectives of public debt, Different Sources of Public Debt, Redemption of Public Debt. Principle of Public Debt Management, Growth of Public Debt in India, Burden of Public Debt.
V	Budget – Meaning, Objectives, Different forms of Budget, Budgetary Process in India, Kinds of Budget – traditional Budget, Performance Budget, Zero Based Budget, Out- come Budget, Gender Budget. Budget Theory – Classical Viewpoint (Balance Budget), Modern View Point (Imbalanced Budget.)

Text Book:

1. Lekhi, R. K., (2014), Public Finance, Kalyani Publication Ludhiana New Delhi
2. S.K., Singh, (2013) Principal of Public Finance Sahitya Bhavan Publication, Agra.
3. Pant, K.C., (2012) Public Finance
4. Sinha, V. C., (2013) Public Finance and Economic, Sahitya Bhavan Publication.

Reference Books:

1. Atkinson, A.B. and J.E. Siglitz (1980), Lectures on Public Economics, Tata McGraw Hill, New York.
2. Government of India (1992), Reports of the Tax Reforms Committee – Interim and Final (Chairman: Raja J. Chelliah).
3. Chelliah, Raja J. et. Al (1981), Trends and issues in India's Federal Finance, NIPFP. New Delhi.
4. Peacock, A. and G.K. Shaw (1976), The Economic Theory of Fiscal Policy, George Alen and Unwin, London.
5. Sahni, B.S. (Ed.) (1972), Public Expenditure Analysis: Selected Readings, Rotherdam University Press.
6. Musgrave, R.A. and P.B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.
7. 15th Finance commission Report
8. Central Govt. and Stat Govt. Budget.

M.A. Economics Semester– II

Programme	Subject	Year	Semester
M.A.	Economics	1st	II
Course Code	**Course Title**		**Course Type**
ECO210	Micro Economics II		Core
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course is intended to acquaint the student with decision making in the context of critical understanding and analytical approach towards behaviour of consumer and decision making, market interdependence, complexity, uncertainties, information asymmetry with the help of linear programming and game theory. Student will gain knowledge of various theories related to distribution, behavioural economics and welfare economics.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to critically understand various alternative theories of profit maximization such as Managerial theory, Limit price theory and Behaviouristic theory of firm.
CO2	Student gain knowledge about concept of linear Programme, general equilibrium Games theory economics efficiency & market failure and able to analyse strategic interaction and exchange between economic agents in game theory strategies and linear programming.
CO3	Able to explain marginal productivity theory of distribution, theory of wages Identify different types of rent, different theories interest and profit.
CO4	Able to apply and identify economic tools and techniques to study the strategic behaviour of economic agents.
CO5	Able to understand how factor market works knowing the Basic tools in welfare economics & know the concept of social welfare functions & compensation principal.

Detailed Syllabus:

Unit No.	Topics
I	Sales maximization model: Baumol's model (price-output determination of a product without advertisement and optimal advertising outlay), Managerial theories of the firm: Williamson's model of managerial discretion, Marris theory of the firm. Theory of limit pricing: Bains model.
II	Theory of distribution: marginal productivity theory of distribution: J. B. Clark's and Marshall – Hicks's Version, Product Exhaustion theorem. Neo-Classical Approach of Distribution: relative share of labour and capital, technological progress and factor shares in income, Determinants of rent, wages, interest and profit (classical and modern Theory).
III	Linear programming & Game Theory - Linear Programming Introduction, & meaning, Conditions and Generalization, Application to the theory of firm, Limitations of Linear Programming, Graphical & Mathematical Solution. Game

	Theory and Price Determination- Introduction, Two Person Zero Sum game, non-constant sum game- Prisoner's Dilemma, Limitations of the Game Theory, importance of the Game Theory.
IV	Behavioural economics: What is behavioural economics? – History and evolution – relation with other disciplines objectives and scope- themes and methodology of behavioural economics (theory, evidence, consilience)- application.
V	Welfare economics Walrasian– introduction, value judgment, classical welfare economics, Pigouvian Welfare economics, Pareto optimal conditions. New welfare economics: compensation principle of Kaldor - Hicks. Social welfare function: Bergson – Samuelsons social welfare function, Arrow's impossibility theorem.

Text Books:

1. Jhingan M. L. (2014), Advanced Economic Theory, Vrinda Publication, New Delhi
2. Jhingan M. L. (2014), Micro Economics, Vrinda Publication, New Delhi
3. Agarwal, A (2014), Micro Economic analysis, Sahitya Bhawan Publication, New Delhi

Reference Books:

1. Mansfield, E. (1997), Microeconomics (9th Edition), W.W. Norton and Company, New York.
2. Ray, N.C. (1975), An Introduction to Microeconomics, Macmillan Company of India Ltd., Delhi.
3. Ryan, W.J.L. (1962), Price Theory, Macmillan and Co. Limited, London.
4. Samuelson, P.A. and W.D. Nordhaus (1998), Economics, Tata McGraw Hill, New Delhi.
5. Stonier, A.W. and D.C. Hague (1972), A Textbook of Economic Theory, ELBS and Longman Group, London.

M.A. Economics Semester – II

Programme	Subject	Year	Semester
M.A.	Economics	1st	II
Course Code	**Course Title**		**Course Type**
ECO220	Macro Economics II		Core
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course provides a broad view of objectives, targets and instruments of macroeconomic policy. It will help Students to understand and develop analytical thinking about new classical and new Keynesian theories of Business cycle. The student will able to assess the role and importance of macroeconomic policy in both classical and Keynesian set-ups.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to critically understand various theories of Inflation, control of Inflation and Philip curve analysis.
CO2	Student gain knowledge about new classical and new Keynesian theories of Business cycle.
CO3	Able to evaluate the formulations of macroeconomic policies such as Monetary and Fiscal policies in stabilizing the economy.
CO4	Able to understand and identify the various types of equilibrium like product market & money market. determination of interest rates can be easily assessed with the help of classical and neoclassical models and derivation of IS-LM curves.
CO5	Able to understand the banking system, credit creation and role of commercial banks in economic development.

Detailed Syllabus:

Unit No.	Topics
I	Theory of Inflation – Classical, Keynesian and Monetarist Approaches to Inflation, Semi and Full inflation, Theory of Structural Inflation, Stagflation, Control of Inflation. Philips Curve Analysis– Short Run and Long Run Philip's Curve. The Natural Rate of Unemployment Hypothesis, Tobin's Modified Philip Curve.
II	Business Cycles, Main Features of Business Cycles, Types of Business Cycle, measures to control business cycle. Theories of Business Cycles - Hawtrey's Monetary Theory of Trade Cycle, Schumpeter's, Keynes, Hicks, Samuelson's, Friedman, Kaldor Model of Trade Cycle.
III	Monetary Policy-Meaning of Monetary Policy, Instrument of Monetary Policy, Objective of Monetary policy, Limitations of Monetary Policy, Monetary Policy and Economic Development. Fiscal Policy– Meaning of Fiscal Policy, Instruments of Fiscal Policy, Objectives of Fiscal Policy, Fiscal Policy and Economic Growth, Effectiveness of Fiscal Policy, Monetarism Vs Fiscalism– The Debate, Similarities between Monetary Policies and Fiscal Policies. The New Classical Macroeconomics, supply side economics.

IV	IS-LM Model, The Product Market Equilibrium, The Money Market Equilibrium, Equilibrium of Product and Money Market, Merits and Demerits of IS-LM Curve, Extension of IS-LM Models with Flexible Prices and Labour Market. Effect of fiscal policy in the Neo-Classical Model, Effect of Monetary Policy in Keynesian System, Effect of monetary policy in Keynesian system.
V	Banking, meaning and function of commercial bank, Credit creation of Commercial bank, Organisation and Structure of Commercial banking, Policies and Principles of Commercial bank, Central banking, Function and Credit Control.

Text books:

1. Sethi, T.T. (2009-10) Macroeconomics, Laxminarayan Agrawal, Agra.
2. Jhingan, M. L. (2008) Monetary Economics, Vrinda publications pvt. ltd.
3 Jhingan, M. L. (2010) Macroeconomic theory, Vrinda publications pvt. ltd.
4. Singhai, G. C. & Mishra J. P. (2013) Macro Economic Analysis, Sahitya Bhawan Publication Agra.

Reference:

1 Blackhouse, R. and A. Salansi (Eds.) (20()), Macroeconomics and the Real World (2 vols) Oxford University Press, London.

2 Branson, W.A. (1989), Macroeconomics Theory and Policy, (3rd Edition), Harper and Row, New York.

3 Aornbusch, R and F. Stanley (1997), Macroeconomics, McGraw Hill, inc., New York

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

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

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

7 Romer, DL. (1996), Advanced macroeconomics, McGraw Hill Company Ltd., New York.

8 Scarte, B.L. (1997), Cycles, Growth and inflation, McGraw Hill, New York.

M.A. Economics Semester – II

Programme	Subject	Year	Semester
M.A.	Economics	1st	II
Course Code	**Course Title**		**Course Type**
ECO230	Research Methodology & Computer Application		Core
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The aim of this course is to study various methods for conducting social science research. It deals with various approaches, methods, tools and techniques which helps in develop interest on research, select and approach a research problem, concept of research design and awareness on research writing skill. Further, it helps students with basic knowledge on computer, data, and estimation of statistical tools by using software and analysing the results of economic relationships, testing economic hypotheses and forecasting.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to demonstrate knowledge about scientific inquiry in social science research.
CO2	Student familiar with basic knowledge of research methodology and sampling techniques.
CO3	Able to explain and organize systematic review of literature to identify research gaps and frame research objectives.
CO4	Able to apply research knowledge on computer, with statistical software, to draw distributive tables, graphs, trend lines.
CO5	Able to compose data using different methods and analyse them for inferences.
CO6	Able to write a systematic research report with defending the arguments.

Detailed Syllabus:

Unit No.	Topics
I	Research methodology and research methods, Research: meaning, types of research, motivation of research, main stages of statistical research, Primary and secondary data, Different methods of collecting primary data, secondary data -different sources, precautions while constructing questionnaire/schedule, editing of primary data.
II	Sampling- Meaning and need for sampling, size of sampling, Merits and limitations of sampling, Sampling and non- sampling errors, Sampling frame, how to judge the reliability of samples. Various methods of sampling, Sampling design: Meaning and steps in sampling design.
III	Classification and tabulation of data: meaning and objective of classification, types of classification, tabulation of data, parts of a table, types of tables. Processing and analysis of data- processing operations, some problems in processing, elements. Types of analysis.

IV	Hypothesis- Meaning of hypothesis, Basic concepts concerning testing of hypothesis, Test of significance based on t-distribution- Student's T- test, Paired T-test, F- ratio test and Fisher's Z test. Practical problems related to student's t test, Chi-square test, F ratio test, paired T test and Fisher's Z test. Test of significance of correlation coefficient.
V	**Fundamentals of computer:** Basic software &hardware, MS-WORD & MS-EXCEL Work sheet, editing and formatting - sorting, filtering and pivot tables - Creating graphs and charts - mathematical and statistical functions -Data analysis pack in Excel - Descriptive statistics, tests of hypothesis, ANOVA, Correlation and Regression, Random Number Generation. Report writing: Meaning and significance of a research report, types of research reports,

Books:

1. Kothari, C.R. & Garg, G. **Research Methodology: Methods And Techniques (Fourth Edition),** New Age International Publishers New Delhi, 2019.
2. Sharma, Ramnath, " Methods and Techniques of Social Survey and Research," A Rajhans Publication.
3. Bajpai, S. R., "Methods of Social Survey and Research," Kitab Ghar, Kanpur-3
4. मुखर्जी, रविन्द्रनाथ, सामाजिक शोध एवं सांख्यिकी, विवेक प्रकाशन, जवाहर नगर, दिल्ली– 7
5. शुक्ला एवं सहाय, सांख्यिकीय, साहित्य भवन पब्लिकेशंस, आगरा.

Reference Books:

1. Goode & Hatt. **Methods in Social Research**, McGraw Hill, International Japan, 1983.
2. Young, P.V. **Scientific Social Survey and Research**, Prentice Hall of Indian, New Delhi, 1984.
3. Raja Raman, V. **Fundamental of Computer**, Prentice Hall of India, New Delhi, 1996.
4. Kenneth D. Bailey. **Methods of Social Research**, The free Press, London, 1982.
5. Piergiorgio, Corbetta. **Social Research: Theory, Methods & Techniques**, sage Publication, New Delhi, 2003.

M.A. Economics Semester – II

Programme	Subject	Year	Semester
M.A.	Economics	1st	II
Course Code	**Course Title**		**Course Type**
ECO240	Indian Economic Policy		Core
Credit	**Hours Per Week**		
	T		**P**
5	6		0
Maximum Marks	**CIA**		**ESE**
100	30		70

Learning Objective:

The course is intended to acquaint the student with deeper understanding of economic situation of Indian economy on different dimensions, and have the opportunity to identify the causes of the problems, and the possible further solutions to improve the Indian economy.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to understand the basic characteristics of Indian economy and its planning process.
CO2	Able to understand the recent trends in the policies by which RBI controls the supply of money in the economy.
CO3	Able to understand the functioning of capital and money market in India and learn the recommendations of various committees to introduce certain reforms in the banking sector.
CO4	Able to understand the structure and direction of India's foreign trade and its policies.
CO5	Understand the WTO and its impact on the different sectors of economy.
CO6	Able to compare the data of different growth aspects of Indian economy with different countries.

Detailed Syllabus:

Unit No.	Topics
I	Planning in India– Objectives and Strategies of Planning, Twelfth Five Year Plan, Development Strategy, LPG Model of Development, PURA- a Neo Gandhian Approach to Development, Developing Gross–root Organization: Panchayats, NGO'S.
II	Problem of Poverty and Inequality – The Concept of Poverty, Measurement and Estimation of Poverty in India, International Comparison of Poverty and Inequality of Incomes, Poverty Eradication Programmes, Causes of Failure to Remove Poverty. Problem of Unemployment in India- Nature of Unemployment, Various Schemes to Reduce the Unemployment, Balanced Regional Development- Indicators, Causes, Changing Scenario and Policy Measures to remove Regional Disparity.
III	Monetary economics: reserve bank of India, functions of RBI- quantitative and qualitative methods of credit control- bank rate policy, open market operations, cash reserve ratio, selective methods, role and limitations of monetary policy with special reference to India. Commercial banking system, Progress of Banking since 1969,

	RRBs, DFIs and NBFCs, Financial Sector Reforms in India, Stock Exchange in India, Composition of Indian Capital Market, SEBI and Capital market reform.
IV	Foreign Trade of India- Importance of Foreign Trade for a developing Economy, Foreign Trade since 1991, Structure and Direction of Foreign Trade, Balance of Payments of India, Issues in Export Import Policies, External value of the Rupee and Foreign Exchange Reserves, FEMA, SEZs, Trade Reforms in India.
V	WTO and its Impact on the Different Sector of Economy, Economic Reforms – Rational of Internal and External Reforms, Cooperative movement in India- Organization, Structure and Development of different types of Cooperatives in India.

Suggested Readings:/ Reference:

1. Ahluwalia, I. J. and I. M. E. Litle (Eds.) 1999): India's Economic Reforms and Development (Essay honor of Manohar Singh), Oxford University Press, New Delhi,
2. Bardhan, P. K. (9th Edition) (1998): The Political Economy of Development India, Oxford University Press, New Delhi.
3. Bawa, R.S. and Raikhy (Ed.) (1997): Structural Change in Indian Economy, Guru Nanak Dev University Press. Amritsar (PB).
4. Brahmananda, P. R. and V. R. Panchmukhi (9th Eds.) (2001): Development Experience in the Indian Economy: Interstate Perspectives, Book well, Delhi.
5. Chakravarty, S. (1987): Development Planning: The Indian Experience, Oxford University Press, New Delhi.
6. Dantwala, M. L. (1996): Dilemmas of Growth: The Indian Experience, Sage Publication, New Delhi.

M.A. Economics Semester – II

Programme	Subject	Year	Semester
M.A.	Economics	1st	II
Course Code	**Course Title**		**Course Type**
ECO250	Public Economics		Core
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to provides a clear understanding of established concepts and theoretical results on collective choice, optimal income taxation and the effects of income redistribution on the provision of public goods. The course will be useful to the students aiming towards careers in the government sectors, policy analysis, business and journalism.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to explain the role of public finance in economic development and understand the principles of fiscal federalism and how fiscal federalism works in India.
CO2	Students will able to explain & understand the principles of federal finance in India. learn of the feature the federal structure and financial relationship among central and state and resource transfers from central to state.
CO3	Able to explain the features, merit, demerits and measures to improvement in Tax system of India.
CO4	Learn about various commissions & committee for Taxation in India.
CO5	Able to understand & explain the financial system, budget and performance of Chhattisgarh Government.
CO6	Able to understand & explain FRBM act. Public Revenue & Public expenditure of Chhattisgarh government.

Detailed Syllabus:

Unit No.	Topics
I	Role of Public Finance in Economic Development, Major Fiscal Function, Concept of Social Goods. Fiscal Federalism in India, Principles of Fiscal Federalism, Vertical and Horizontal Imbalances.
II	Federal Finance – Principle of Federal Finance in India, Centre – State Financial Relation, Resource Transfer from Centre to States, Gadgil's Formula. Fifteen Finance Commission.
III	Indian Tax System: - Salient Features, Merits, Demerits, Measures for improvement of Indian Tax system Government measures for improvement: - Taxation enquiry Commission (1953-54), Wanchoo committee, Jha Committee, Kelkar Committee Report, Chelliah Committee Recommendations for reforming the taxation system.

IV	Analysis of Centre & Chhattisgarh Govt. Budget, Kinds of financial deficit, taxable and non-taxable income of Chhattisgarh. Performance of the Chhattisgarh government budget.
V	Financial Responsibilities and Budget Management Act, Structure and growth of public expenditure in Chhattisgarh, Revenue Expenditure and Capital Expenditure.

Text Books:

1. Lekhi, R. K., (2014), Public Finance, Kalyani Publication Ludhiana New Delhi
2. S.K., Singh, (2013) Principal of Public Finance Sahitya Bhavan Publication, Agra.
3. Pant, K.C., (2012) Public Finance
4. Sinha, V.C., (2013) Public Finance and Economic, Sahitya Bhavan Publication.

Reference Books:

1. Atkinson, A.B. and J.E. Stiglitz (1980), Lectures on Public Economics, Tata McGraw Hill, New York.
2. Government of India (1992), Reports of the Tax Reforms Committee – Interim and Final (Chairman: Raja J. Chelliah).
3. Chelliah, Raja J. et. Al (1981), Trends and issues in India's Federal Finance, NIPFP. New Delhi.
4. Peacock, A. and G.K. Shaw (1976), The Economic Theory of Fiscal Policy, George Alen and Unwin, London.
5. Sahni, B.S. (Ed.) (1972), Public Expenditure Analysis: Selected Readings, Rotterdam University Press.
6. Musgrave, R.A. and P.B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogaku Sha, Tokyo.
7. 15th Finance commission Report.
8. Central Govt. and Stat Govt. Budget.

M.A. Economics Semester – III

Programme	Subject	Year	Semester
M.A.	Economics	2nd	III
Course Code	**Course Title**		**Course Type**
ECO310	Economics of Growth		Core
Credit	**Hours Per Week**		
	T		**P**
4	5		0
Maximum Marks	**CIA**		**ESE**
100	30		70

Learning Objective:

The course aims to provide knowledge to the students to explore diverse dimension and measures of growth & development, as well as the application of microeconomic analysis to issues of development in poor countries. It also through light on various theories of growth as well as impart theoretical knowledge about the concepts of poverty, inequality, development gap and various development indices.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Understand the basic concept of Economic Growth and Measurement of Economic Growth, factors of economic growth, Obstacles of Economic Development, Vicious Circle of poverty, characteristics of an Underdeveloped Country.
CO2	Become familiar with factors affecting economic growth and development.
CO3	Able to understand the concept of modern growth. Savings, investment and capital formation, concept of human resource and economic growth, Human development Index, Gender Development index, Gender empowerment measure, multidimensional index.
CO4	Acquaint them with the latest issues and policies related with human development and help them to develop familiarity with the concept of human capital.
CO5	Learn & understand various Classical theories of Growth, Model and Approaches of Growth.
CO6	Learn & understand various Neo-Classical theories of Growth, Model and Approaches of Growth.
CO7	Able to understand The Concept of Capital Output Ratio, Input- Output Analysis, Project Evaluation and its methods and Cost-Benefit Analysis, Economic Growth and Income Distribution: The Kuznets Hypothesis.

Detailed Syllabus:

Unit No.	Topics
I	Economic Growth: Economic Growth and Development, Measurement of Economic Growth, Vicious Circle of poverty, Pre Condition of Economic Development, Factors of Economic Growth: Economic and Non-Economic, Meaning and characteristics of an Underdeveloped Country, Obstacles of Economic Development.
II	Meaning and Characteristics of Modern Economic Growth, Savings, Investment and Capital formation, Human resource and economic growth Structural Changes under

	Development, Human Capital formation, A note on the demonstration effect, Human development Index, Gender Inequality Index, Women empowerment index, multidimensional index
III	Theories of Growth: Classical Theory. Adam Smith Theory of growth, The Ricardian Theory of growth, Mills theory of growth, Malthusian theory of development, Harrod - Domar model of growth, Joan Robinson model of growth
IV	Meads Neo-Classical Model of growth, Solow Long- Run model growth, Approaches to Growth: -Kaldor model of Growth, The Models of Technical Change, Pasinetti model of Profit & Growth.
V	The Mahalanobis Four Sector Model. The Concept of Capital Output Ratio, Input-Output Analysis, Project Evaluation and its methods and Cost-Benefit Analysis, Economic Growth and Income Distribution: The Kuznets Hypothesis.

Text Books:

1. Jhingan, M. L. (2008), 31st edition, The economics of development and Planning, Vrinda publication Pvt. Ltd.
2. Shinghai, G.C. & Mishra J.P. (2013) Macroeconomic Analysis, Sahitya Bhawan publication Agra.
3. Mishra, J.P. (2012) Economics of Growth and development, Sahitya Bhawan publication, Agra.

Reference Books:

1. Hajela P.D. (1998), Labour Restructuring in India: A Critique of the New Economic Policies, Common wealth Publishers, New Delhi.
2. Jhabvala, R. and R.K. Subrahmanya (Eds.) (2000). The Unorganized Sector: Work Security and Social Protection. Sage Publication, New Delhi.
3. Lester, R.A. (1964). Economics of Labour. (2nd Edition), Macmillan, New York.
4. Mc Connell, C.R. and S.L. Brue (1986). Contemporary Labour Economics, Mc Graw-Hill New York.
5. Papola, T.S.P.P. Ghosh and A.N. Sharma (Eds.) 1993, Labour, Employment and industrial Relations in India, B.R. Publishing Corporation New Delhi.
6. Rosenberh M.R. (1998), Labour Markets I Low Income Countries in Chenery, H.B. and T.N. Srinivasan, (Eds.) The Handbook of Development Economics, North-Holland, New York.
7. Venkata Ratnam, C.S. (2001), Globalization and Labour- Management Relations Dynamics of change, Sage publications/ Response Books, New Delhi.

M.A. Economics Semester – III

Programme		Subject	Year	Semester
M.A.		Economics	2nd	III
Course Code		**Course Title**		**Course Type**
ECO320		International Trade		Core
Credit		**Hours Per Week**		
		T		**P**
4		5		0
Maximum Marks		**CIA**		**ESE**
100		30		70

Learning Objective:

The course aims to provides a clear understanding of established concepts and theoretical base of International Trade, gains of International Trade and its distribution. It makes students familiar with various measures of protective trade such as Tariff and non-tariff barriers, Devaluation, Dumping, Subsidies and international cartel. It will help students to identify and analyse suitable trade policy for the country.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to acquire a sound understanding of the theories underlying international trade.
CO2	Able to explain the modern theories of international trade.
CO3	Able to explain terms of trade in international trade.
CO4	Able to understand & explain theories of intervention in international trade.
CO5	Able to understand & explain various approaches of Balance of Payment, reason of disequilibrium in balance of payment and be able to suggest measure to correct BOP disequilibrium.
CO6	Able to understand & explain the concepts of foreign trade multiplier, foreign repercussion and various theories of exchange rate.

Detailed Syllabus:

Unit No.	Topics
I	Theory of International Trade – Meaning and Distinguishing Features of Inter-regional and International Trade, The Comparative Cost Theory, Refinements of the Comparative Cost Theory, Opportunity Cost Theory, Theory of Reciprocal Demand.
II	Modern Theory of International Trade, Factor Price Equalization, Theorem of International Trade, Stolper-Samuelson and Rybczynski Theorems. The Terms of Trade – Concepts, Determination of Terms of Trade, Factors Affecting Terms of Trade, Terms of Trade & Economic Development, Its Empirical Relevance and Policy Implications for Less Developed Countries, Terms of Trade & Welfare Implications.
III	The Theory of Intervention – Tariffs, Quotas, and Non-tariff Barriers, Economic Effects of Tariff and Quotas on National Income, Output, Consumption, Price, Employment, Terms of Trade & Income Distribution, The Stolper–Samuelson Theorem of Tariff on Income Distribution, The Learner's Paradox.

IV	Balance of Payments – Meaning and components, Equilibrium and Disequilibrium in the BoP, Measures to Correct the Adverse BoP, Adjustment Mechanisms of BoP, Devaluation- The J-curve effect, Marshall-Lerner's Conditions under Devaluation, Expenditure Reducing and Expenditure Switching Policies and Direct Control.
V	Income Adjustment- Foreign Trade Multiplier, Foreign Repercussion or Back-Wash Effect, Foreign Exchange Rate-Spot and Forward Exchanges Rates, Fixed and Flexible Exchange Rates, their Merits and Demerits, Hybrid Exchange Rate, Floating Rate of Exchange, Managed Floating System

Suggested Readings/ Reference:

1. Bhagwati, J. (Ed). (1981): International Trade, Selected readings, Cambridge, University Press, Massachusetts.
2. Carbaugh, R.J. (1999), International Economics, International Thompson Publishing, New York.
3. Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
4. Dana, D. S. (2000), International Economics: Study Guide and Work Book, (5th Edition), Routledge Publishers, London.
5. Dunn, R. M., and J. H. Mutti (2000), International Economics, Routledge, London.
6. Kenen, P.B. (1994), The International Economy, Cambridge University Press, London.
7. Kindleberger, C. P. (1973), International Economics and International Economic Policy A Ready, McGraw Hill International, Singapore.
8. Krugman, P. R. and M. Obstfeld (1994), International Economics: Theory and Policy, Glenview, Foresman.

M.A. Economics Semester – III

Programme	Subject	Year	Semester
M.A.	Economics	2nd	III
Course Code	**Course Title**		**Course Type**
ECO330	Environmental Economics		Core
Credit	**Hours Per Week**		
	T	**P**	
4	5	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to provides a clear understanding about the position of sustainable development so that he/she masters the significance & scope of environmental economics and able to understand the problems of environmental resource, environmental and social services, valuation of these services and Environment-Economy Linkages.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Student gain knowledge about the economics of environment about environmental degradation, ethics, natural resource exploitation and theory of optimal resource extraction
CO2	Able to explain the relationship among Environment, Micro Economics and Macro Economics
CO3	Able to analyse the fundamental theories of welfare economics, concept of market failure and welfare judgments, Pigouvian taxes and subsidies and how to maximization of social welfare.
CO4	Able to understand & explain relationship among Population, Agriculture and The Environment.
CO5	Able to understand & explain the concept of ecological economics, National income and environmental accounting.
CO6	Able to understand & explain the concept of environmental values and methods of environmental valuation.

Detailed Syllabus:

Unit No.	Topics
I	The Economics of Environment –An elementary introduction, the big economy, causes of environmental degradation, ethics, economics and the environment. The circular flow model, Natural resources exploitation, the efficient and optimal use of natural resources. The theory of optimal resource extraction – non-renewable resources two-period model, an extension of the multi-period model of non-renewable resource depletion. Welfare economics and the environment – Benthem and Pareto Criteria.
II	Economic Theory of Environmental Issues - The Theory of Environmental Externalities, Accounting for Environmental Cost, Internalizing Environmental Cost,

	Positive Externalities. Market Failure and Public Goods, Social choice of optimum pollution, Pigovian Taxes and subsidies, Maximization of Social Welfare Under Perfect Competition.
III	Population, Agriculture and The Environment - Population and the Environment- Demographic Transition and Environment, Population Growth and Economic Growth, Population Policy for the 21st Century, Agriculture, Food and Environment, Sustainable Agriculture for the Future, Environment and Neo-Classical Modal of Natural Resources, Energy and Resources.
IV	Ecological Economics, National Income and Environmental Accounting – Ecological Economics Basic Concept, Natural Capital and Accounting for Changes in Natural Capital, Macro Economic Scale, Model of Economic and Ecological System. National Income and Accounting - Natural Capital, System of Environment and Economic Accounts (SEEA).
V	Environmental Value and Methods - Use Value, Option Value and Non-Use Value, Environmental Cost Benefit Analysis, Methods of environmental valuation- Hedonic Pricing. Household Production Function, Travel Cost Method, Averting Behaviour Approach, Contingent Valuation Method, Irreversibility risk and uncertainty.

Suggested Readings/ Reference:

1. Madhu Raj – Environmental Economics.
2. Steve Baker – Environmental Economics.
3. D.W. Pearce – Environmental Economics.
4. Baumol, W.J. and W.E. Oates. (1988): The Theory of Environmental Policy, (2nd Edition), Cambridge University Press, Cambridge.
5. Thomas and Callan (2009): Environmental Economics.
6. Charles D. Kolasted (2005): Environmental Economics, Oxford University Press.
7. Brian Roach, Jonathan M. Harries and Anne Marie codur (2015): Microeconomics and the environment, Global Development and Environment Institute, Tufts University, Medford.
8. Jonathan M. Harries and Anne-Marie codur (2004): Macroeconomics and the environment, Global Development and Environment Institute, Tufts University, Medford.

M.A. Economics Semester – III

Programme	Subject	Year	Semester
M.A.	Economics	2nd	III
Course Code	**Course Title**		**Course Type**
ECO340	Industrial Economics		Elective
Credit	**Hours Per Week**		
	T	**P**	
4	5	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to give thorough knowledge to students about Industrial development in India and help them to understand the economics of industry and issues related to market structure, firms' motivations and conducts, productivity, efficiency, capacity and trends of industrial growth.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to explain the concept, term and theories of industrial economics.
CO2	learn about industrial productivity, efficiency and capacity.
CO3	Able to explain the various laws, regulation and acts of industries in India.
CO4	understand an insight into the inter-linkages between agriculture, industry and service sectors.
CO5	Able to understand policy implication in solving industrial disputes and labour problem.
CO6	Able to explain the structure of industrial labour, employment dimensions, industrial relation, large scale industries and other important concept related to industrial economics.

Detailed Syllabus:

Unit No.	Topics
I	Concept and Organization of a Firm-Ownership, Control and Objectives of the Firm. Rationale of Industrialization: - Agriculture and Industrialization – patterns, process, speed, Implications of Industrialization. Theories of Industrial location, Alfred Weber and Sergeant Florence Theory. Factors Affecting Industrial Localization.
II	Industrial Productivity, Efficiency and Capacity. Recent Trends in Industrial Growth. Strategies for Industrial Growth, Regional Development of Industries.
III	Industrial Development in India, Industrial policies of 1948, 1956, and 1991, Role of public and private sector industries in India. Privatization and Disinvestment.
IV	Structure of Industrial Labour, Employment Dimensions of Indian Industry. Industrial Legislation, Industrial Relations, Exit policy and Social Security.
V	Large Scale Industries: - Iron and Steel, Cement, Jute, Sugar, paper industries, Development of Small Scale and Cottage Industries in India.

Text books:

1. Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
2. Barthwal, R.R. (1985): Industrial Economics, Wiley Eastern Ltd., New Delhi.
3. Chernilam, F (1994): Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
4. Desai, B. (1999), Industrial Economic in India (3rd Edition), Himalaya Publishing house Mumbai.
5. Kuchhal. S.C, the industrial economy of India, Chaitanya publishing house.

Reference Books:

1. Divine, P.J. and R.M. Jones et. At. (1976): An Introduction to industrial economics, George Allen and Unwin Ltd., London.
2. Government of India, Economic Survey (Annual)
3. Hay, D. and D.J. Morries (1979), Industrial Economics: Theory and Evidence, Oxford University Press, New Delhi.
4. Kuchhal, S.C. (1980): Industrial Economy of India, Chaitanya Publishing House, Allahabad.
5. Reserve Bank of India Report on Currency and Finance (Annual).
6. Singh, A. and A. Sadhu (1988): Industrial Economics, Himalaya Publishing House

M.A. Economics Semester – III

Programme	Subject	Year	Semester
M.A.	Economics	2nd	III
Course Code	**Course Title**		**Course Type**
ECO340	Labour Economics		Elective
Credit	**Hours Per Week**		
	T	**P**	
4	5	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to laid a special emphasis on informal sector and the problem of labour in India. It helps students to learn and understand the concept of labour economics, different theories on labour market & movement, labour laws & legislation in India and welfare aspects of agriculture, child and women labour in India.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to understand the nature, characteristics and importance of labour market.
CO2	Learn & understand the classical and modern theories of labour market and theories of labour movement.
CO3	Develop awareness on institutional influence in labour market.
CO4	Acquire knowledge on post globalization scenario of labour market in India.
CO5	Aware about the laws and practices in relation to national and international labour standards.
CO6	Develop awareness on welfare of labour, concept of industrial peace, dispute settlement and National labour commission.

Detailed Syllabus:

Unit No.	Topics
I	Labour Economics - Definition, Nature, Scope & Importance, Labour Market – Nature and Characteristics of Labour Markets in India. Supply of Labour - Labour force, Factors affecting Law of Labour Supply. Demand for Labour – Labour productivity, Demand for Labour by Industrialist.
II	Theories of labour market: - Classical Theory of labour, Marginal productivity theory of Labour Concept of wages – Real Wages, Nominal Wages, Factors Affecting Real wages, Theories of Wage Determination - Classical Theory, New Theory, The theory of Collective Bargaining.
III	Theories of Labour Movement - Labour Unions in India, Rise and Growth of Labour Union, Achievements of Labour Unions. Structure and Pattern of Trade Union - Objectives, Growth, Achievements and Failures.
IV	Labour Legislation in Indian Labour, Laws and Practices in Relation to International Labour Standards. State and Labour, State and Social Security of Labour, Concept of Social Security and its Evolution Labour policy in India.

V	Labour Welfare in India, Rural and Agricultural Labour in India, Child Labour, Female Labour, Concept of Industrial Peace, Settlement of Industrial Dispute, Second National Labour Commission.

Suggested Readings/ Reference:

1. Goyal, Sunil & Goyal, M.L. (2008): Labour Economics, R.B.S.A. Publications, Jaipur.
2. Saxsena, R.C. (2010): Labour Problems & Social Welfare, K. Nath and Company Publication, Meret.
3. Singh, Dilip Kumar, (2008): Workers Participation in Management and Industrial Relation, Rawat Publication, Jaipur & Delhi.
4. Singh, Usha & Singh, H.P. (2011): Child Labour in India: Problem and Solutions, Classical Publication, New Delhi
5. Gupta, P. K., Labour Economics, Vrinda publications, New Delhi.

M.A. Economics Semester – III

Programme	Subject	Year	Semester
M.A.	Economics	2nd	III
Course Code	**Course Title**		**Course Type**
ECO350	Demography		Elective
Credit	**Hours Per Week**		
	T	**P**	
4	5	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to provide knowledge regarding the dynamics of population and to evaluate critically various concept and theories related with the population growth and economic development of the region and country. It will expand their knowledge about vital statistics and demographic variables. The course would orient them towards the quantitative and the qualitative aspects and characteristics of the population through various demographic techniques.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to understand meaning and importance of Theories of Population- Optimum Population and Theory of demographic transition etc
CO2	understand the theoretical approach to the relationship between population growth and economic development.
CO3	Able to evaluate and compare population policy and population data of different countries to suggest policy measures regarding human development.
CO4	Acquaint knowledge and able to analyse social demographic variables and calculate measures of fertility, mortality and migration to compare and study of demographic process related to different regions.
CO5	Able to explain the concept and analysis of Women and Labour Market; women's work participation, determinants of wage deferential, gender & education and other related concepts.

Detailed Syllabus:

Unit No.	Topics
I	Demography – Meaning and Importance, scope and nature techniques of demographic analysis, tools of demographic analysis, population education, population growth and economic development, population policy.
II	Theories of Population – Pre Malthusian theories of population, Malthusian theory of population, Theory of Optimum Population and Theory of Demographic Transition–C. P. Blacker theory, Karl Marx theory, Donald Olen Cowgill's theory
III	Migration – meaning and importance, classification of migration, factors affecting migration, hurdles in migration, measurement of migration, effects of migration, theories of migration, pull and push theory of migration, Ravenstein theory of migration, stepwise movement theory, Lee's theory of migration, urbanization, causes and effects of urbanization, methods to measure urbanization.

IV	Fertility– Meaning, Causes of High Birth Rate in India, Trends in Birth Rate in India, Measurement of Fertility and Reproduction – Crude Birth Rate, General Fertility Rate, Age-Specific Fertility Rate, Total Fertility Rate. Gross Reproduction Rate and Net Reproduction Rate. Problems Related to Fertility and Reproduction Rates.
V	Mortality – Meaning and Sources of Mortality Data, Causes of High Death Rate in India, Trends in Death Rate in India, Measurement of Mortality Based on Death Statistics, Crude Death, Specific Death Rate, Infant Mortality Rate and Standardized Death Rate, Child Mortality Rate, Maternal Mortality Rate, Life Table – Functions and Construction of Life Table. Problems Related to Death Rates and Life Table.

Suggested Readings/ Reference:

1. Agrawal, S. N., India's population Problems, Tata Mc-Graw Hill co. Bombay.
2. Bogue, D. J. Principles of Demography", Honwiley, New York.
3. Sinha, V. C. and Pushpa Sinha, „Principles of Demography", Mayur Paper backs.
4. Mishra, Jai Prakash, Demography", Sahitya Bhawan Publications, Agra.
5. Pathak, K. B. and F. Ram, „Techniques of Demographic Analysis", Himalaya Publishing House.
6. Jhingan, M. L. and others, „Demography", Vrinda Publications (P) Ltd.
7. Srinivasan, K., Basic Demographic Techniques and Applications", Sage Publication.

Reference Books:

1. Census India SRS Bulletins, Registrar General of India, Govt. of India, 2011
2. Rural-Urban distribution *Census of India: Census Data 2001: India at a glance >> Rural-Urban Distribution.* Office of the Registrar General and Census Commissioner, India. Retrieved on 2008-11-26.
3. Number of Villages *Census of India: Number of Villages* Office of the Registrar General and Census Commissioner, India. Retrieved on 2008-11-26.
4. Urban Agglomerations and Towns *Census of India: Urban Agglomerations and Towns.* Office of the Registrar General and Census Commissioner, India. Retrieved on 2008-11-26.
5. Preston, S.H. (1976). Family Sizes of Children and Family Sizes of Women. *Demography* 13(1): 105-114.
6. Pritchett, L.H. (1994). Desired Fertility and the Impact of Population Policies. *Population and Development Review* 20(1): 1-55.

M.A. Economics Semester – III

Programme	Subject	Year	Semester
M.A.	Economics	2nd	III
Course Code	**Course Title**		**Course Type**
ECO350	Mathematical Economics		Elective
Credit	**Hours Per Week**		
	T	**P**	
4	5	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to familiarise the students with the conceptual routes to exposed economic concepts in mathematical format through simple illustrations & prepares the ground for more scientific study understand abstract ideas and rigorous methods in mathematical analysis to solve practical problems.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to the chain rule and use it to find derivative of composite functions and obtain expression for higher order derivatives of a function using the rule of differentiation.
CO2	Able to evaluate determinants and use them to discriminate between invertible and non-invertible Matrices
CO3	Able to frame problems using multiple mathematical and statistical representations of relevant structures and relationships and solve using standard techniques.
CO4	Able to apply the methods of differentiation for solving the problems of economics.
CO5	Able to understand the concept of number series and ability to solve systems of equations.

Detailed Syllabus:

Unit No.	Topics
I	Mathematical Economics: Meaning and Importance, Sets, functions and continuity, sequence, series, Differential Calculus and its Applications, Difference and Differential equations with application, Linear Algebra- Matrices, Vector Spaces. Mathematical Representation of Economic Models, Economic functions: Demand function, Supply function, Utility function, Consumption function, Production function, Cost function, Revenue function, Profit function, Saving function, Investment function
II	Marginal utility, Marginal propensity to Consume, Marginal propensity to Save, Marginal product, Marginal Cost, Marginal Revenue, Marginal Rate of Substitution, Marginal Rate of Technical Substitution. Relationship between Average Revenue and Marginal Revenue Relationship between Average Cost and Marginal Cost - Elasticity: Price elasticity, Income elasticity, Cross elasticity
III	Optimisation of single / multi variable functions - Constrained optimisation with Lagrange Multiplier –Significance of Lagrange Multiplier. Economic applications: Utility Maximisation, Cost Minimisation, Profit Maximisation.

IV	Production function- homogeneous and non-homogeneous - Degree of homogeneity and returns to scale - Properties of Cobb-Douglas production function. - Production possibility curve. - Linear programming: Basic concept, Nature of feasible, basic and optimal solution;
V	Graphic solution -The Dual - Applications of linear programming in economics. Input-output analysis - Matrix of technical coefficients -The Leontief matrix - computation of total demand for a two/ three sector economy. Market Equilibrium: Perfect Competition -Monopoly - Discriminating Monopoly

Suggested Readings/ Reference:

1. K. Sydsaeter and P. J. Hammond (2002): Mathematics for Economic Analysis. Pearson Educational Asia
2. A. C. Chiang and K. Wainwright (2005): Fundamental Methods of Mathematical Economics, McGraw Hill International Edition.
3. T. Yamane (2012): Mathematics for Economists, Prentice-Hall of India
4. Fundamentals of Mathematical Economics, S.C. Gupta & V.K Kapoor 4. Mathematics for Economists, Mehta & Madnani

M.A. Economics Semester – IV

Programme	Subject	Year	Semester
M.A.	Economics	2nd	IV
Course Code	**Course Title**		**Course Type**
ECO410	Economics of Development and Planning		Core
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to familiarise the students with the conceptual routes, theoretical dynamics and practical strategies of Economic Planning, growth and development of India. The course would orient them towards major theories, Approaches, & Models of development which lead them towards more methodological probes and equip them with adequate analytical knowledge.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to explain objective, strategy, achievements, and failures of economic planning in India.
CO2	Aware about saving, capital formation and overall growth rate and important facts with latest data of Indian economy.
CO3	Able to explain the Twelfth Five-year plan and achievements of eleventh five-year plan of India.
CO4	Acquaint knowledge and able to understand the theories of development, approaches of development and able to understand the Models of development.
CO5	Have conceptual framework of investment criteria in economic development.
CO6	Able to explain various criteria of social marginal productivity, capital turnover, Re investment, Time series and Choice of techniques etc.

Detailed Syllabus:

Unit No.	Topics
I	Economic Planning: objective, Achievement and failures of Indian Plans, Resource Mobilization in Indian Plans, Strategy of Indian Plan. Saving, Capital Formation and Overall Growth Rate, Twelfth Five Year Plan (2012-17) Achievement of Eleventh Five Year Plan, NITI Aayog.
II	Theories of Development: - The Marxian Model, The Schumpeterian Model, Keynesian Theory of Development, Rostow's Stages of Economic Growth. Marx Stages of Growth, Disguised unemployment as saving potential.
III	Approaches to Development- Arthur Lewis Model of Unlimited Supply of Labour, Ranis & Fie Model, Leibenstein's Critical Minimum Effort thesis, The Big push theory, Nelson's theory of low level of equilibrium.

IV	Development Models: - Theory of Balanced Growth, External Economics, Industrialization and Balanced Growth, The concept of Unbalanced Growth, Dualistic Theory, The Limits to Growth Model, Myrdal's Theory of Circular Causation.
V	Investment Criteria in Economic Development; The social Marginal Productivity Criteria, The capital Turnover Criteria, The Re-investment Criterion, Time Series Criterion, the Choice of Techniques, The Harris –Todaro model of Migration and Unemployment.

Text books:

1. Jhingan, M.L. (2003), The Economics of development and planning, vrinda publication pvt. Ltd.
2. Shinghai, G.C. & Mishra,J.P.(2013) Macro Economic Analysis, Sahitya bhawan publication Agra.
3. Mishra, J.P. (2012) Economics of Growth and Development, Sahitya bhawan publication Agra.

Reference Books:

1. Todaro, M.P. (1996) (6th edition) Economic Development, Longman London.
2. Solow, R.M. (2000), Growth Theory an Exposition, Oxford University Press, Oxford.
3. United Nations, Human development Department report 2005.
4. Behrman, S. and T.N. Shrinivasan (1995), Hand book of Development Economics, Vol 1, 2 & 3, Elsevier; Amsterdam.
5. Ghatak,s (1986), An introduction to development Economics, Allen & elnein, London.
6. Sen, A.K. (Ed.) 1990 growth Economics, Penguin, Harmondsworth.
7. Dasgupta, P.A.K. Sen and S. Marglin (1972), Guidelines for project Evaluation, UNIDO, Vienna,
8. Mehrotra, S. and J. Richard (1998), Development with a Human Face, Oxford University Press New Delhi.

M.A. Economics Semester – IV

Programme	Subject	Year	Semester
M.A.	Economics	2nd	IV
Course Code	**Course Title**		**Course Type**
ECO420	International Economics		Core
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to provides a Profound knowledge about evolution of International Monetary system, regional blocks & unions, theories of capital movement and the basic ideologies of international organization at the global level.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Learn about foreign trade and economic development and their importance.
CO2	Learn about theories of regional blocks, custom unions and regionalism of European Union and their importance.
CO3	Able to understand & explain short-term & long-term theories of capital movement and international trade.
CO4	Learn about International monetary system and its various organizations.
CO5	Learn & understand about concept of various international organizations and its objective and working and regulations of MNCs in India.
CO6	Learn how to deal with international institutions and to maintain relation with other countries.

Detailed Syllabus:

Unit No.	Topics
I	Foreign Trade and Economic Development, The Theory of Regional Blocks- Customs Union, Static and Dynamic Effects of a Customs Union and Free Trade Area, Rational of Economic Progress of SAARC, ASEAN, IBSA and BRICS.
II	Regionalism of European Union, The Euro-Dollar Market, NIEO, WTO- Functions of WTO, Multilateralism and WTO, TRIPS, TRIMS, Agriculture, Market- Access, Textile Clothing, Patent Rights, Ministerial Conferences of WTO, UNCTAD.
III	Theory of Short Term &Long-Term Capital Movement and International Trade– Port Folio Investment and International trade, FDI and International Trade, Merits & Demerits of Long-Term Capital Movement in International Trade, Factors Affecting International Capital Movement, The Transfer Problem, Optimum Currency Area, Global Financial Crisis.
IV	International Monetary System, International Liquidity, IMF, World Bank, The World Bank Group, ADB, Foreign Capital in India.

V	International Organisations- G-20, G-15, BIMSTEC, OPEC, NAFTA, OECD, Working and Regulations of MNCs in India.

Suggested Readings/ Reference:

1. Bhagwati, J. (Ed). (1981): International Trade, Selected Readings, Cambridge, University press, Massachusetts.
2. Carbough, R. J. (1999), International Economics, International Thompson Publishing, New York.
3. Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
4. Dana, M.S. (2000), International Economics: Study Guide and Work Book, (5th Edition), Routledge Publishers, London.
5. Dunn, R. M. And J. H. Mutti (2000), International Economics, Routledge, London.
6. Kenen, P. B. (1994), The International Economy, Cambridge University Press, London.
7. Kindleberger, C. P. (1973), International Economics and International Economic Policy A Reader, McGraw Hill International, Singapore.
8. Krugman, P. R. and M. Obstfeld (1994), International Economics: Theory and Policy, Glenview, Foresman.

M.A. Economics Semester – IV

Programme	Subject	Year	Semester
M.A.	Economics	2nd	IV
Course Code	**Course Title**		**Course Type**
ECO430	Economics of Social Sector		Core
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The aim of the course is to familiarize the students with the concepts of Environmental Economics, principles and theories of optimal use of natural resources, environmental issues, Environmental Valuations methods property rights, social costs etc. which will help them to find out the appropriate policy suggestions to improve the quality of Environment.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Understand the nature and importance of Environmental Economics and Realize the importance and influence of environment on the economy
CO2	Able to explain the concepts of Pigouvian taxes and Subsidies, Coase's bargaining solution collective bargaining.
CO3	Understand and explain the concept of tradable pollution permits and International Carbon Tax.
CO4	Acquaint knowledge and able to explain the economic theory of environmental issues.
CO5	Able to explain the relationship between population, agriculture and environment. evaluate the concept of environmental value and their valuation methods.
CO6	Able to suggest appropriate policy measures to control Environmental Degradation

Detailed Syllabus:

Unit No.	Topics
I	Environmental Pollution- classification of pollution, Air, Water and Land Pollution, Cause & Effects of pollutant. Pollution control targets – A static model of efficient flow pollution. Pollution control strategies, Equi-Marginal law of pollution.
II	Pollution policy with imperfect information - Global environmental problems - Climate change, Global warming, Green House Effect, Ozone depletion, game theory, environmental input/output analysis.
III	Development and Environment: Relation between development & environmental stress, The Environmental Kuznets Curve, the concept of Sustainable Development, Indicators of sustainability, Measuring sustainable development, Green Economy.
IV	Economics of Resources- Classification of resources, Renewable & Non-renewable resources, Optimum use of resources. Land resources, Forest resources, social

	forestry, Peoples participation in the management of Common & forest land. Energy- Sources of energy, energy efficiency & environment, Alternative sources of energy. International trade and the environment.
V	Economics of Education and Health: Expenditure on education, Productive expenditure on education, Productivity of education, the return of education, Human capital Vs Physical capital. Health Economics- Determinants of health care, Inequalities in health- class & gender, Perspective HDI, GDI, GEM and HPI.

Suggested Readings/ Reference:

1. Baurnol, W.J. and W.E. Oates (1988): The Theory of Environmental Policy, (2nd Edition), Cambridge University Press, Cambridge.
2. Berman, P. (Ed.) (1995): Health Sector reform in Developing Countries: Making health development sustainable, Boston: Harvard Series on Population and International health.
3. Blaug, M. (1972): Introduction to Economics of Education J Penguin, London.
4. Bromely, D.W. (Ed.) (1995): Handbook of Environmental Economics, Blackwell, London.
5. Cohn, E. and T. Gaske (1989): Economics of Education, Pergamon Press, London.
6. Fisher, A.C. (1981): resource and Environmental Economics, Cambridge University Press, Cambridge.
7. Hanley, N.J.F. Shogern and B. White (1997): Environmental Economics in Theory and Practice, Macmillan.
8. Hussen, A.M. (1999): Principles of Environmental Economics, Routledge. London.
9. Jeroen, C.J.M. van den Bergh (1999): Handbook of Environmental and Resource Economics, Edward Elgar Publishing Ltd. U.K.
10. Thomas and Callan (2009): Environmental Economics.

M.A. Economics Semester – IV

Programme	Subject	Year	Semester
M.A.	Economics	2nd	IV
Course Code	**Course Title**		**Course Type**
ECO440	Agricultural Economics		Elective
Credit	**Hours Per Week**		
	T		**P**
5	6		0
Maximum Marks	**CIA**		**ESE**
100	30		70

Learning Objective:

The course aims to familiarise the students with the conceptual routes, theoretical dynamics and practical strategies of different theories on agricultural development to enhance their skills in undertaking research in the field of agricultural economics. It provides details views of the process of agricultural development in the country since independence.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to understand & explain the role of agriculture in economic development, models of agricultural development, various aspects of agricultural price policy in developing countries.
CO2	Able to understand the relationship between inputs and output, causes of uncertainty and causes of instability in agriculture.
CO3	Able to explain the importance and role of land reforms in economic development.
CO4	Able to explain the relationship between the size of the farm and agricultural productivity, working of price policy in Indian agriculture, concept of diversification in agriculture and problems associated with its implementation.
CO5	Able to understand & explain the problems faced by small farmers and rural labourers, root causes of indebtedness; and remedial measures, different sources of agricultural credit and their relative importance.
CO6	Able to understand the working of marketing policy in Indian agriculture, causes and effects of green revolution, estimate the productivity trends in Indian agriculture.

Detailed Syllabus:

Unit No.	Topics
I	Nature and scope of Agricultural economics- Traditional and Modern agriculture, role of agriculture in economic development. Problems in rural industrialization, development of Agro-based industries, interdependence between agriculture and industry. Green revolution. Agricultural production, Production function analysis, cost concept in agricultural product, farm budgeting, Resource use and efficiency in Agricultural sector.

II	Land use, Principles of land utilization, land distribution, Land values and rent, Land reform measures and performance, Land tenures and farming systems, problems of marginal and small farmers. Rural Labour supply, Mobility of labour and labour market in agriculture sector. Nature of employment in rural sector Agriculture wages in India. Male-Female wage difference in agriculture.
III	Rural Finance - Role of rur.al capital and rural credit, Rural capital and capital formation, Characteristics and source of rural credit, Institutional and non-institutional rural credit, Rural Banks, Commercial Banks, Regional Rural Banks and Rural Credit Co-operatives Societies. Agricultural Prices-Agricultural markets, Behaviour of agricultural prices, agricultural. Markets and agricultural marketable surplus. Taxation, crop insurance, state policy and Agricultural price policy.
IV	Agricultural Growth in India - Recent trends, inter-regional variation in growth of agricultural product, cropping pattern, factors affecting productivity, pricing of inputs, role of subsidies, role of technology and input of irrigation in Agricultural sector. Problems and prospects of Globalization and W.T.O. in India Agricultural commodities.
V	Infrastructure - Infrastructure and economic development, the structure of Transportation costs, Demand for transportation, Cost function in the transport Sector, Telephone utilities, role of postal services, Demand for Energy, Energy conservation, Renewable and Non-conventional Sources of Energy.

Suggested Readings/ Reference:

1. Bhahacharjee, J.P. - Studies. in Indian Agricultural Economics.
2. Rao, V.K.R.V.- New Challenge before Indian Agriculture.
3. Mellor, J.W. - The Economics of Agricultural Development.
4. Bhadure, A. (1984), The Economic Structure of Backward Agriculture, Macmillan, Delhi.
5. Bilgrami, S.A.R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.
6. Dantewada, M.L. Et.al, (1991), Indian Agricultural Development Since independence, Oxford & BH, New Delhi.
7. Government of India (1976), Report of the National Commission of Agriculture, New Delhi.
8. Government of India, Economic Survey (Annual), New Delhi.
9. Joshi, P.C. (1975), Land Reforms in India: Trends and. Prospects. Allied Publishers, Bombay.

M.A. Economics Semester – IV

Programme	Subject	Year	Semester
M.A.	Economics	2nd	IV
Course Code	**Course Title**		**Course Type**
ECO440	Econometrics		Elective
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to define Econometrics, steps in Empirical Economic Analysis, Different types of data involved in econometric Analysis. The courses involved Simple and Multiple Linear regression model and Functional forms of Non-Linear Regression models. Basic concept of Auto regressive distributed lag model (ARDL) developed which will be helpful for future research work with time series data.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to present the economic phenomena from ground level reality and the theoretical perspective of economic relationship to empirical verification.
CO2	To Learn development of null & alternative hypothesis & types of errors, how hypothesis can be tested, decision about the statistical significance can be taken just by introspection of probability value.
CO3	Able to develop regression model and apply for the specific perspective data in appropriate manner.
CO4	Able to understand the concepts of multicollinearity, autocorrelation and heteroscedasticity.
CO5	To learn and develop scientific view to understand the time series data and its analysis, stationary and non-stationary time series models.
CO6	Able to apply auto regressive, moving average, ARMA, ARIMA models, Box Jenkins approach to forecast time series data empirically.

Detailed Syllabus:

Unit No.	Topics
I	Introduction to Econometrics and Econometric Analysis, Steps involved in Econometric Analysis Introduction to Classical Linear Regression Model- Two variable classical linear regression model Assumptions of Classical Linear Regression Model-Multicollinearity, Heteroscedasticity and Autocorrelation
II	Classical Linear Regression Model assumptions, Estimation of the regression model, Properties of Ordinary Least Square estimators, Regression analysis: Objective, Statistical Analysis, and Interpretation of results, Hypothesis Testing-Types of

	Hypotheses, Test statistic, Critical Region.
III	Hypothesis testing: Level of significance and confidence interval approach; Goodness of Fit(R^2): Concepts of Explained Sum of Squares (ESS)-Residual Sum of Squares -Total Sum of Squares Multiple Linear Regression Model: Interpretation of the model, Statistical Analysis, Interpretation of the results, Model misspecification: R^2 vs Adjusted R^2
IV	F Statistics-Application of F Statistics-Overall significance of the Model-Equality between two regression coefficients- Testing the validity of linear restricted and Unrestricted Models Introduction to Dummy Variable, Statistical Analysis of the Dummy variable models. Simultaneous equation model – specification – identification – rank and order conditions – problems. Introduction to Time Series Analysis, Forecasting Time Series, Concept of stationarity Forecasting with ARIMA Modelling.
V	Sets, functions and continuity, sequence, series, Differential Calculus and its Applications, Difference and Differential equations with application, Linear Algebra- Matrices, Vector Spaces

Textbooks:

1. Basic Econometrics, D N Gujarati
2. Introductory Econometrics: A modern approach Wooldridge
3. Fundamentals of Mathematical Economics, S.C. Gupta & V.K Kapoor
4. Mathematics for Economists, Mehta & Madnani.

M.A. Economics Semester – IV

Programme	Subject	Year	Semester
M.A.	Economics	2nd	IV
Course Code	**Course Title**		**Course Type**
ECO450	Money & Banking		Elective
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to provide the students with a thorough understanding of the importance of money and banking in various economies. It aims to provide the students with an introduction to understand the concept of money, theories of money supply and money demand and working of monetary policy. It provides an insight into the Banking system.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to understand different types and functions performed by money.
CO2	Able to understand the various theories of money by different economists; its different functions and factors for liquidity preference.
CO3	Able to understanding the factors affecting the supply of money in the economy.
CO4	Able to understanding role of central bank in economy and different functions performed by them.
CO5	Able to understanding various types of commercial banks; different functions performed by them.
CO6	Able to understanding the basic concept and impact of fiscal and monetary policy on the functioning of the economy.

Detailed Syllabus:

Unit No.	Topics
I	**Money and Its Functions:** Evolution of money, Money: Meaning and functions; Classification of money: Money and Near Money; Qualities of good money material; Role of money in a developing and mixed economy: Gresham's Law
II	**Price Index Numbers and Theories of Money:** Price Index Numbers: Meaning and types; Steps in Construction of Price Index Numbers; Conceptual and Practical difficulties in the Measurement of Index Numbers; Importance of Index Numbers: Fisher's Transactions Approach and Cambridge Cash Balance Approach; A comparison of Fisherian and Cambridge Versions
III	**Commercial Banks:** Commercial Banks: Meaning and functions; Types of Banks; Role of Commercial Banks in a developing economy, Process of Credit creation; Structure of Indian Commercial Banking; Banking Sector Reforms in India since 1991

IV	**Central Banking:** Central Bank: Meaning and Functions; Objectives of Credit Control: Qualitative and quantitative Methods of Credit Control; Role of Central Bank in Developing Economy: Difference between Central Bank and Commercial Bank.
V	**Monetary and Fiscal Policies:** Monetary and fiscal policy: Meaning, Features; Role of Monetary and Fiscal policy in developing countries; Monetary Policy Effects on Demand, Fiscal Policy Effects on Demand, Fiscal Policy and Investment, Interaction of Monetary and Fiscal Policies.

Suggested Readings/ Reference:

1. Hajela, T.N., (2009) Money and Banking, ANE Books Pvt Ltd., New Delhi.
2. Sundharam KPM, Banking: Theory, Law and Practice, Sultan Chand and Sons, New Delhi (recent edition)
3. M.R. Baye, D.W. Jansen (1996), Money, Banking and Financial Markets, AITBS (Indian ed.).
4. K.C. Sekhar: Banking – Theory and Practice, Vikas Publishing House, New Delhi (recent edition).
5. S.B. Gupta, Monetary Economics, S. Chand Publications, New Delhi.
6. M.L. Seth, Monetary Economics, Vikas Publications, New Delhi
7. R.R. Paul, Money, Banking & International Trade, Kalyani Publications, Ludhiana.

M.A. Economics Semester – IV

Programme	Subject	Year	Semester
M.A.	Economics	2nd	IV
Course Code	**Course Title**		**Course Type**
ECO450	Project Work		Elective
Credit	**Hours Per Week**		
	T	**P**	
5	6	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The aim of the course is to make student to take up a mini research topic and to work on it to carry out research activities for further studies. It is a well-planned, organized and goal-oriented work. Hence students understand application of economic concepts in real life situations.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to applied their knowledge into practical application.
CO2	Able to exposure their knowledge with regard to sampling and collection of data and processing of data
CO3	Able to apply statistical tools for analysing economic phenomena.
CO4	Able to analysis of data with the help of the statistical software's and interpretate it in well planned and managed report writing.

M.A. Economics

Generic Elective Courses

(Offered to PG students of other departments / SoS only)

Programme	Subject	Year	Semester
M.A.	Economics	2nd	IV
Course Code	**Course Title**		**Course Type**
ECO510	Basic Concept of Economics		GEC
Credit	**Hours Per Week**		
	T	**P**	
2	2	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to familiarise the students with basic concepts of economics. It deals with basic knowledge theories of microeconomics, macroeconomics and development and growth.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Understand the nature, scope and problems of economics.
CO2	Understand the concept of demand and supply.
CO3	Understand the concept of utility, revenue, cost and theories of production.
CO4	Understand the concept of and theories of macroeconomic like national income, consumption function, savings, investment, inflation, monetary and fiscal policy.
CO5	Understand the concept of development and growth like developed& developing economy, HDI, Sustainable development, WTO and international trade.

Detailed Syllabus:

Unit No.	Topics
I	Basic Economic Problems, Scope of Economics and its nature, Equilibrium Analysis, Demand, Elasticity of Demand, Law of Diminishing Marginal Utility. Consumer Surplus, Supply- Elasticity of Supply, Production Function, The Concept of Cost and its Nature, The Concept of Revenue,
II	The Concept of Market and its Kinds. Perfect Market imperfect Market, Monopoly, Marginal Theory of Distribution, Macro Economics- National Income Definition, Types and methods of Measurement, Consumption Function, Saving and Investment, Inflation, Monetary and Fiscal Policy.
III	Development and Growth -Meaning and Definition, Obstacle, Features of Developed and Developing Countries, HDI, Sustainable Development, WTO, International Trade and Balance of Payment in India.

Text Books:

1. Jhingan, M. L. (2014), Advanced Economic Theory, Vrinda Publication, New Delhi
2. Ahuja, H. L. (2014), Advanced Economic Theory, S. Chand Publication, New Delhi
3. Jhingan, M. L. (2014), Macro Economic analysis, Vrinda Publication, New Delhi.
4. Ahuja, H. L. (2014), Macro Economic Theory, S. Chand Publication, New Delhi
5. Jhingan, M.L. (2008)31ST edition, The Economics of Development and Planning, Vrinda publication New Delhi.
6. Mishra, J.P. (2012) Economics of Growth and Development, Sahitya bhawan publication Agra.
7. Vaish, M. C. and Sudama Singh, (2011) International Economics, Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi.

M.A. Economics

Generic Elective Courses

(Offered to PG students of other departments / SoS only)

Programme	Subject	Year	Semester
M.A.	Economics	2nd	IV
Course Code	**Course Title**		**Course Type**
ECO520	Indian Economy		GEC
Credit	**Hours Per Week**		
	T	**P**	
2	2	0	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course is intended to acquaint the student with Knowledge &understanding of Indian economy on different dimensions, and have the opportunity to identify the causes of the problems, and the possible further solutions to improve the Indian economy.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to understand the basic characteristics and structure of Indian economy.
CO2	Able to understand the concept of National income and role of primary, secondary and territory sector in Indian Economy.
CO3	Able to understand role of agriculture and industry in development of Indian economy.

CO4	Able to understand role of territory and foreign sector in development of Indian economy.
CO5	Able to understand the role of public finance in development of Indian economy.

Detailed Syllabus:

Unit No.	Topics
I	GDP and National Income of India, Role of Primary, Secondary & Tertiary Sectors in GDP of India, National Income and Per Capita Income, Planning in India – Objectives and strategies of planning, NITI Aayog, Demographic Features of India and Chhattisgarh, National Population Policy.
II	Agricultural Development in Indian Economy – Agricultural Growth and Productivity, Green Revolution, Food Security in India, Poverty and Inequality in India, Industrial Development in India, Industrial Policies of 1956 and 1991, Public sector Enterprises and their performance, MSMEs.
III	External Sector Behaviour of Indian Economy - Structure and Direction of Foreign Trade, Public Finance in Indian Economy – Fiscal Federation, Central-State Financial Relationship, Fourteenth Report of Finance Commission.

Text Books:

1. Ahulwalia, I. J. and I. M. E. Litle (Eds.) 1999), India's Economic Reforms and Development (Essay honor of Manohar Singh), Oxford University Press, New Delhi.
2. Bardhan, P. K. (9th Edition) (1998), The Political Economy of Development India, Oxford University Press, New Delhi.
3. Bawa, R.S. and Raikhy (Ed.) (1997), Structural change in Indian Economy, Guru Nanak Dev University Press. Amritsar.
4. Brahmananda, P. R. and V. R. Panchmukhi, Development Experience in the Indian Economy: Interstate Perspectives, Bookwell, Delhi (9th Eds.) 2001.
5. Chakravarty, S. (1987): Development Planning: The Indian Experience, Oxford University Press, New Delhi.
6. Dantwala, M.L. (1996): Dilemmas of Growth: the Indian Experience, Sage Publication, New Delhi.
7. Dutta, Gourav and Ashwini Mahajan, (2014) Indian Economy, S. Chand Publications, New Delhi, 71st Edition.
8. Mishra, S. K. and V. K. Puri, (2014) Indian Economy, Himalaya Publishing House Pvt. Ltd., New Delhi, 32ndEdition

M.A. Economics

Skill Enhancement / Value Added Courses

(Offered to PG students of SoS in Economics)

Programme	Subject	Year	Semester
M.A.	Economics	2nd	IV
Course Code	**Course Title**		**Course Type**
ECO610	Indian Knowledge System: Indian Economic Thought		VAC
Credit	**Hours Per Week**		
	T	**P**	
2	0	4	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to familiarise the students with Indian economic thought. The study of ancient Indian economic ideas provides a deeper insight into India's culture, tradition, and inherent national characteristics. The major sources of information about the economic ideas of Indian writers are Vedas, Arthasastra, the Ramayana and Mahabharata, Manusmriti, Sukraniti, and several other ancient Indian texts.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	Able to understand and familiarise with the basic Knowledge of Indian economic thought.
CO2	Able to understand the economic thought of Kautilya's Economics.
CO3	Able to understand the economic thought of Buddhism and Economics.
CO4	Able to understand the economic thought of Mahatma Gandhi and Dr. B.R. Ambedkar.
CO5	Able to understand the economic thought of Modern India.

Detailed Syllabus:

Unit No.	Topics
I	**Vaidik Sanatan Arthshastra,** Kautilya's Economics: view on the Taxation and pricing policy, Kautilya on leadership qualities, Kautilya's view on the treasury and public finance of the state, Leader and Manager **Buddhism and Economics:** Introduction, Buddhism and the economic enterprise, Prices and Taxation, Altruism and Economics
II	**Mahatma Gandhi and Dr. B.R. Ambedkar:** Introduction, Swadeshi movement of Mahatma Gandhi, Economic Thoughts of Mahatma Gandhi on Technology, Industrialization and the scale of production, Economic Thoughts of Dr. B.R. Ambedkar on Banking system, Industrialization, and Agricultural reforms.

III	**Modern economic ideas:** Dadabhai Naorojee, Jawaharlal Nehru, Noble laureates: Amartya Sen and Abhishek Banarjee. (Emphasis has to be given on economic thought rather than on theories.)

Suggested Readings/ Reference:

1. Rangarajan, L.N. (1992). Kautilya: The Arthashastra. Penguin Books.
2. Kautilya's Arthashastra, Translated by R. Shamashastry
3. Pillai, R., & Sivanandhan, D. (2022). Chanakya's 7 Secrets of Leadership. JAICO.
4. Drechsler, W. (2017). Buddhist economics: An introduction. London: Routledge.
5. Siriwardhana, N. (2016). Buddhist economics: The middle way between materialism and asceticism. Journal of Buddhist Ethics, 23, 1-27.
6. Kumarappa, Joseph Cornelius (1951). Gandhian economic thought. Library of Indian economics (1st ed.). Bombay, India: Vora.
7. B. N. Ghosh, Gandhian political economy: principles, practice and policy (2007) p. 17
8. Thorat, S. (2017). Dr. Ambedkar and the Indian economy. Pearson India Education Services.
9. Dr. B. R. Ambedkar (1923). The problem of Indian rupee: Its origin and its solution: (History of Indian Currency & Banking).
10. Ajit K. Dasgupta (1993). A History of Indian Economic Thought, London and New York.
11. Singh, Om Prakash. Vaidik Sanatan Arthshastra Aanupatik mulya, aaya maapan evam poorna rojgar sidhant sahit, Lokhit Prakashan (2021).
12. Dadabhai Naoroj, Poverty and un-British rule in India (1901)
13. Mahatma Gandhi, Hind Swaraj, (1906)

M.A. Economics

Skill Enhancement / Value Added Courses

(Offered to PG students of SoS in Economics)

Programme	Subject	Year	Semester
M.A.	Economics	2nd	IV
Course Code	**Course Title**		**Course Type**
ECO620	Data Analysis Using SPSS		VAC
Credit	**Hours Per Week**		
	T	**P**	
2	0	4	
Maximum Marks	**CIA**	**ESE**	
100	30	70	

Learning Objective:

The course aims to familiarise the students with computer application in economic analysis. It deals with basic knowledge on computer, data, and estimation of statistical tools by using software and analysing the results of economic relationships, testing economic hypotheses and forecasting.

Course Outcome:

Expected Course Outcome At the end of the program, the student will be able to:	
CO1	To become familiar with basic knowledge on computer.
CO2	To become familiar with a statistical software statistical viz., E-views, SPSS and R.
CO3	To draw distributive tables, graphs, trend lines.
CO4	To estimate the parameters of multiple regressions with the help of software and interpret it.
CO5	To estimate weights, distributive tables, regression and other relevant techniques by using statistical software.

Detailed Syllabus:

Unit No.	Topics
I	**Computer Fundamentals** Definition - Components of a computer-block diagram, Hardware and Software, **MS-WORD** Creating, opening and saving files - editing and formatting text - spell and grammar check – auto correct- hyphenation – creating of tables and columns - mail merge - equation editor – concept of a macro - print preview.
II	**MS-EXCEL Work sheet** – entering data – creation of worksheets and workbooks – opening and saving workbooks - editing and formatting - sorting, filtering and pivot tables - Creating graphs and charts - mathematical and statistical functions -Data analysis pack in Excel - Descriptive statistics, tests of hypothesis, ANOVA, Correlation and Regression, Random Number Generation.

III	**Data Handling Using SPSS** Opening Excel files in SPSS - Variables, labels and values, Analysis tools - Descriptive statistics - Selection of variables in multiple linear regression - Stepwise, forward and backward procedures - Factor analysis and Discriminant analysis (Stress on procedures and syntax only).

Suggested Readings/ Reference:

1. Shelly and Hunt, Computers and Common Sense, Prentice Hall of India, New Delhi.
2. Rajaraman V, Fundamentals of Computers, Prentice Hall of India, New Delhi.
3. Peter Dalgaard (2008): Introductory Statistics with R, 2nd Edition, Springer, New York.
4. Peter Norton's Introduction to computers, Tata McGraw Hill Publishing Co., New York.
5. Foster, J.J. (2001), Data Analysing using SPSS For Windows 8.0 – 10.0, A Beginner's Guide. 6. M. Crawley, Basic Statistics: An Introduction using R.
6. B.S. Everitt& T. Hothorn, A Handbook of Statistical Analyses Using R (2nd Ed.).
7. J. Maindonald & J. Braun, Data Analysis and Graphics Using R: An Example-based. Approach.
8. P. Murrell, R Graphics (2nd Ed.).