M.A ECONOMICS

(W.E.F. Academic Session 2024-2025 onwards)

Syllabus

(As per NEP 2020)

Pandit Deendayal Upadhyaya Shekhawati University
Sikar (Rajasthan) 332024
E-mail: reg.shekhauni@gmail.com
Website: www.shekhauni.ac.in

Curriculum Structure									
Session 2024-2025 onwards									
Name of the Programme: Master of Economics									
Year: First						Semester: I (Pawas)			
Pawas Semester I	Course Code	Course Title	Contact Hrs per Week			Credits	Weightage (%)		
			L	T	P		CW$	MTE	ETE
	Discipline Specific Core (DSC):								
	24MES9101T	Micro Economic Theory-I	4	0	0	4	10	20	70
	24MES9102T	Macro Economic Theory-I	4	0	0	4	10	20	70
	24MES9103T	Quantitative Methods for Economics-I	4	0	0	4	10	20	70
	24MES9104T	History of Economic Thought	4	0	0	4	10	20	70
	Discipline Specific Elective(DSE):								
	24MES9105T	Indian Banking System	4	0	0	4	10	20	70
	OR								
	24MES9106T	Labour And Industrial Relation	4	0	0	4	10	20	70
	Value Added Course(VAC):								
	---	---	2	0	0	2	10	20	70
	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):								
	---	---	--	--	--	--	--	--	--
		Total				22			

Summary: I Semester (Pawas)		Credits
S.N.	**Particulars**	
1.	Discipline Specific Core(DSC):	16
2.	Discipline Specific Elective (DSE):	04
3.	Value Added Course (VAC):	02
4.	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):	00
	Total	22
$CW (Class work): It would include attendance, class test/quiz test/assignments, ppt, play, learn by fun activities etc.		

Note: VAC to be selected from the list of courses for PG, given on University website.

Dy. Registrar
Pandit Deendayal Upadhyaya
Shekhawati University,
Sikar(Rajasthan)

Curriculum Structure										
Session 2024-2025 onwards										
Name of the Programme: Master of Economics										
Year: First							Semester:II (Vasant)			
	Course Code	Course Title	Contact Hrs per Week			Credits	Weightage (%)			
			L	T	P		CW$	MTE	ETE	
Vasant Semester II	**Discipline Specific Core (DSC):**									
	24MES9201T	Micro Economic Theory-II	4	0	0	4	10	20	70	
	24MES9202T	Macro Economic Theory-II	4	0	0	4	10	20	70	
	24MES9203T	Quantitative Methods for Economics-II	4	0	0	4	10	20	70	
	24MES9204T	Research Methodology for Economics Analysis	4	0	0	4	10	20	70	
	Discipline Specific Elective(DSE):									
	24MES9205T	Agricultural Economics	4	0	0	4	10	20	70	
	OR									
	24MES9206T	Demography	4	0	0	4	10	20	70	
	Value Added Course(VAC):									
	---	---	2	0	0	2	10	20	70	
	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):									
	---	---	--	--	--	--	--	--	--	
		Total				22				

Summary: II Semester (Vasant)		Credits
S.N.	Particulars	
1.	Discipline Specific Core(DSC):	16
2.	Discipline Specific Elective (DSE):	04
3.	Value Added Course (VAC):	02
4.	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):	00
	Total	22
$CW (Class work): It would include attendance, class test/quiz test/assignments, ppt, play, learn by fun activities etc.		

Note: VAC to be selected from the list of courses for PG, given on University website.

Dy. Registrar
Pandit Deendayal Upadhyaya
Shekhawati University,
Sikar(Rajasthan)

Curriculum Structure										
Session 2024-2025 onwards										
Name of the Program: Master of Economics										
Year: Second							Semester: III (Pawas)			
Pawas Semester III	Course Code	Course Title	Contact Hrs per Week			Credits	Weightage (%)		
			L	T	P		CW$	MTE	ETE
	Discipline Specific Core (DSC):								
	24MES9301T	Economics of Development and Growth	4	0	0	4	10	20	70
	24MES9302T	International Trade Theory	4	0	0	4	10	20	70
	Discipline Specific Elective(DSE): (Select any Four)								
	24MES9303T	Public Economics	4	0	0	4	10	20	70
	24MES9304T	Indian Economy	4	0	0	4	10	20	70
	24MES9305T	Mathematical Economics	4	0	0	4	10	20	70
	24MES9306T	Econometrics	4	0	0	4	10	20	70
	24MES9307T	Environmental Economics	4	0	0	4	10	20	70
	24MES9308T	Industrial Economics	4	0	0	4	10	20	70
	Value Added Course(VAC):								
	---	---	--	--	--	2	--	--	--
	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):								
	---	---	--	--	--	--	--	--	--
		Total				**26**			

Summary: III Semester (Pawas)		Credits
S.N.	**Particulars**	
1.	Discipline Specific Core(DSC):	**08**
2.	Discipline Specific Elective (DSE):	**16**
3.	Value Added Course (VAC):	**02**
4.	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):	**00**
	Total	**26**
$CW (Class work): It would include attendance, class test/quiz test/assignments, ppt, play, learn by fun activities etc.		

Note: VAC to be selected from the list of VAC courses for PG, given on University website.

Dy. Registrar
Pandit Deendayal Upadhyaya
Shekhawati University,
Sikar(Rajasthan)

Curriculum Structure									
Session 2024-2025 onwards									
Name of the Program: Master of Economics									
Year: Second						Semester: IV (Vasant)			
Vasant Semester IV	Course Code	Course Title	Contact Hrs per Week			Credits	Weightage (%)		
			L	T	P		CW$	MTE	ETE
	Discipline Specific Core (DSC):								
	24MES9401T	Advance Theory of Economics of Development and Growth	4	0	0	4	10	20	70
	Discipline Specific Elective(DSE): Select any Two								
	24MES9402T	Advanced Public Economics	4	0	0	4	10	20	70
	24MES9403T	Advanced Indian Economy	4	0	0	4	10	20	70
	24MES9404T	Advanced Mathematical Economics	4	0	0	4	10	20	70
	24MES9405T	Econometric Methods and Applications	4	0	0	4	10	20	70
	24MES9406T	Advanced Environmental Economics	4	0	0	4	10	20	70
	24MES9407T	Advanced Industrial Economics	4	0	0	4	10	20	70
	Value Added Course(VAC):								
	---	---	--	--	--	--	--	--	--
	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C): (Select Any One)								
	24MES9401D	Dissertation	--	--	--	**8**	--	--	100
	24MES9401I	Internship	--	--	--	**8**	--	--	100
		Total				**20**			

Summary: IV Semester (Vasant)		Credits
S.N.	Particulars	
1.	Discipline Specific Core(DSC):	**04**
2.	Discipline Specific Elective (DSE):	**08**
3.	Value Added Course (VAC):	**00**
4.	Seminar/Internship/Apprenticeship/Project/Community Outreach (S/I/A/P/C):	**08**
	Total	**20**
$CW (Class work): It would include attendance, class test/quiz test/assignments, ppt, play, learn by fun activities etc.		

Dy. Registrar
Pandit Deendayal Upadhyaya
Shekhawati University,
Sikar(Rajasthan)

Semester – I

Learning Objectives

This course aims at analysing the economic behavior of the consumers, firms and markets. It is mainly concerned with the objective of equipping the students in a comprehensive manner with various aspects of consumer behavior and demand analysis, Production theory and behavior of cost, equilibrium of firm and various forms of market. At the end of this course students are expected to be familiar microeconomic theory and acquire analytical skills to analyse problems of economic policy.

Learning Outcomes

- This course develops understanding of fundamentals of Micro Economics and market mechanism.
- It enhances the ability of students to discuss economic concepts in an articulate manner in a classroom.
- It develops the reasoning ability of the students to understand the consumer behaviour and producers' behaviour in real market situation market.

Course Title:	Micro Economic Theory-I	Course Code: 24MES9101T
Total Lecture hour 60		**Hours**
Unit I	Consumer choice: Utility function and indifference curve analysis- Bads, Neutrals, Optimal choice, Corner point solutions, Price, Income and Substitution effects, Engle curves, Slutsky theorem and Derivation of demand curves. Consumer equilibrium. Consumer surplus. Elasticity of demand- Laffer curve. Network externalities– Bandwagon effect, Snob effect, Veblen effect.	16
Unit II	Production function: Short and long run. Law of returns and Returns to scale, Ridge lines, Expansion path. Producer equilibrium. Forms of production function: Cobb- Douglas, Fixed coefficient and CES. Elasticity of technical substitution, Capital and labor deepening technical progress through Iso-quants.	17
Unit III	Concept of cost :Short and long run cost curves. Dynamic changes in costs – Learning curve. Modem theory of cost curves. Concept of revenue, Revenue curves under different market structures	12
Unit IV	Pricing under different market structures: Perfect competition. The efficiency of a competitive market. Price supports. Monopoly. Social cost of monopoly; Power of monopoly; International price discrimination and Peak – load pricing. Two-part tariff. Monopolistic competition. Bilateral monopoly.	15

Reference Books:

1	A. Koutsoviannis: Modern Micro Economics, MacMillan, London
2	H.L. Ahuja: Advanced Economic Theory, S. Chand & Co., New Delhi
3	H.L. Ahuja: Uchchatar Arthik Siddhant (Hindi) S. Chand & Co., New Delhi.
4	D. Salvatore: Micro Economic Theory, Schaum's Outline Series, Third edition, McGraw-Hill, Inc. New Delhi
5	D. Salvatore: Micro Economic Theory, Harper Collins
6	J.M. Joshi: Theory of Value, Distribution and Welfare (Vikas, New Delhi)
7	.C. Roy Choudhary: Micro Economics, Tata McGraw Hill Publishing Co., New Delhi
8	D. Salvatore: Micro Economic Theory, Harper Collins
9	P.R.G Layard and A.A Walters: Micro Economic Theory McGraw Hill Publishing Co., New Delhi
10	Hal R. Varian: Micro Economic Analysis (Indian Print), Affiliated East West Press Pvt. Ltd., New Delhi.

Learning Objectives

Macroeconomics deals with the movement, fluctuations and growth in economic aggregates like income, employment interest rates and the price level. This paper is designed to provide in-depth knowledge on development

of Macroeconomics and varied concepts of Macroeconomics. The contents of the paper throws light on a range of issues like national income, social accounting, consumption expenditure, investment analysis as well as money supply and demand for money.

Learning Outcomes

- This course enables the students to learn about the development of various theories and approaches of macroeconomics like classical, Keynesian, Monetarist, New classical theories and New Keynesian theory. It analyses Macroeconomic variables and National Income in greater detail.
- It educates students various theories related to consumption and investment.
- Students acquire knowledge on issues like money supply and demand. This course is to help the learners in proper understanding of the economic aggregates.

Course Title:	**Macro Economic Theory-I**	**Course Code: 24MES9102T**
Total Lecture hour 60		**Hours**
Unit I	Basic Concepts & Methodology, Macro Economic Variables (e.g., national income, employment, saving, investment, price level, wages, interest rate), Real and nominal quantities, Stock and flow variables and their inter- relationship, Problem of aggregation in the construction of Macro Economic variables. Difference between micro and macroeconomics.	16
Unit II	National income- Concepts, Components, Measurement, Inter- relationship between three measures of national income; Measurement of economic welfare. Circular flow of income in two, three and four sector economy social accounting and green accounting.	17
Unit III	Consumption function – Determinants, Consumption function hypotheses: Absolute, Relative, Permanent income hypotheses and Life cycle hypothesis; Investment function- Neo-classical theory of investment , Stock market and Tobin's Q-ratio and Neo – Keynesian theory of investment ; Theories of accelerator.	12
Unit IV	Classical, Keynesian, and Post Keynesian theories of demand for money- Inventory theory of Baumol and Portfolio balance theory of tobin; Restatement of quantity theory of money by Milton Friedmanand, Patinkin's Theory for money demand.Supply of money- Measurement in view of India, Components, Determinants, High- powered money & money multiplier and Theories of money- supply.	15

Reference Books:

1	Gardner Ackley: Macro Economic Theory (Latest Ed.) (Macmillan, New York).
2	Martin J Bailley: National Income and the Price Level, Chap. 2 and 3
3	Edward Shapiro: Macro Economic Analysis (Latest Ed.) (Harcourt Brace Jovanovich)
4	K.C. Rana and K.N. Verma: Macro Economic Analysis (Vishal Publishers).
5	William H. Branson and James M. Litvack: Macro Economics (Harper and Row).
6	Rosalind lavacic: Macro Economics (Macmillan)
7	M.J.C. Surry (Ed): Macro Economic Theories (Tata MacGraw Hill)
8	R.F. Henson: Guide To Keynes (Tata McGraw-Hill)
9	Dadle Dillard: A Guide to Keynes (Tata McGraw-Hill)
10	M.K. Evans: Macro Economic Activity (MacMillan Publication)
11	M.G. Muller(Ed) Readings in Macro Economics, 1966 (Edward Elgar Publishing)
12	Reserve bank of India: Leports on Currency and Finance 4. Reserve Bank of India: Annual Reports-1998 onwards
13	Reserve Bank of India: Monthly Bulletin
14	J.M. Keynes: The General Theory of Employment, Interest and money (MacMillan Cambridge University Press)
15	Barret: Macro Economic Policy (Prentice Hall)
16	Uma Dutta Roy Choudhary: National Income Accounting, Macmillan India Ltd. Delhi
17	H.L Ahuja: Samashti Arthshastra (Hindi), Macro Economics (Eng)

18	Rudi Dornbush, S Fisher and R. Startz: Macroeconomics, Tata McGra- Hill Edition, 2000
19	Raghbendra Jha: Contemporary Macroeconomics (Edward Elgar Publishing)

Learning Objectives

The aim of this course is to train students in the use of mathematical tools to understand concepts in economics presented in the form of mathematical models and express economic ideas in the same form. The course is intended to enable the students to utilize these tools in subsequent courses.

Learning Outcomes

- This course imparts the knowledge of various mathematical techniques used for economic analysis.
- It train the students to apply these techniques to economic theory in general like, explaining the relationship among economics variables, calculating maxima and minima, explaining the time path of variables etc.
- It also develops the skill of students to use matrix algebra in solution of economic models.
- Students gain knowledge of linear programming and game Theory to resolve economic issues.

Course Title:	Quantitative Methods For Economics-I	Course Code: 24MES9103T
Total Lecture hour 60		Hours
Unit I	Simple differentiation; Maxima, Minima and Point of inflexion. Applications of simple differentiation in economics.Partial differentiation; Unconstrained and Constrained optimization (Two independent variable case). Applications partial differentiation in economics	16
Unit II	Integration: Indefinite and Definite; Applications of integration in economics, First order difference equations and their application in economics.	17
Unit III	Matrices: Various types of matrices, Inverse of a matrix, Vectors. Determinants: Important properties and their applications in economics, Crammer's rule	12
Unit IV	Input-output model, Linear programming (graphical and simplex methods) and Game theory.	15

Reference Books:

1	S.P Gupta: Statistical Methods, Sultan Chand & Sons, New Delhi.
2	B.C Mehta and G.M.K. Madnani: Mathematics for Economics, Sultan chand& sons, New Delhi.
3	Kailash Nath Nagar: SankhiyikikeMool Tatva (Hindi) Meenakshi Prakashan, Meerut
4	Laxmi Narain Nathuramka: Arthshastra Mein Ganit ke Prayog (Hindi), College Book House, Jaipur
5	R.G.D Allen: Mathematical Analysis for Economists. MacMillan, London.
6	Alpha C. Chiang: Fundamental Methods of Mathematical Economics, McGraw-Hill, Tokyo.
7	F.F Croxton, D.S Cowden & S. Klein: Applied General Statistics, Prentice Hall of India. New Delhi.
8	A.L. Nagar and R.K. Das: Basic Statistics, Oxford University Press.
9	A.L. Nagar & P.D. Sharma: Statistical Methods of Economic Analysis, S.Chand& Co. New Delhi.
10	Edward T. Dowling: Mathematics for Economists, Schaum's Outline Series, McGraw-Hill Book Co., New Delhi.

Course Title:	History of Economic Thought	Course Code: 24MES9104T
Total Lecture hour 60		Hours
Unit I	Mercantilism, Physiocrates, Quesnay's Economic Table, Concept of Surplus, growth theory, taxation and role of Government. Classical school - Adam Smith, the invisible hand doctrine, Wealth of Nations, Laissez fairs, Profits and wages:; Modern revival of Adam Smith, Critiques of Adam Smith.	16
Unit II	Malthus's theory of population and theory of under competition: Ricardo Principles of Political Economy and Taxation, Distribution theory different rents. Differences with Say on	17

	determination of value. Modern revival and interpretation. Critics of the classical school - Sismondi, Socialist and the nationalist school: Re- Stateinent of the classical position. Senior and the four postulates.	
Unit III	J.S. Mill - four prepositions and capital demand and supply bi-furcation, wage fund. Rehabilitation by Cairsness, Stationery State Version, non-competing groups. Evaluation of socialist thought- Utopian, Socialism, Saint Simon, Own Balne, Fourier, Proudhob, Scientific socialist. Karl Marx Efforts at scientific socialism; Organic composition of capital; Break down of capitalism, Reserve Army of Labour; Critiques of Marx Modern, Revival of Marx in Economics.	12
Unit IV	The German Historical School and the development of Marginalize; The neo-classical school, Marshall. Twentieth century economic thought-main features (only the rise of Keynesianism, the rise of mathematical Economics, dynamics and econometrics); Critical evaluation of the development of economic thought; Indian economic thought- Kautilya and Gandhi.	15
Reference Books:		
1	H. Haney: A History of Economic Thought	
2	Eric Roll: A History of Economic Thought.	
3	Lionel Robbins: A History of Economic Thought	
4	S.K. Srivastava: A History of Economic Thought	
5	H.L. Bhatia: A History of Economic Thought.	

Course Title:	**Indian Banking System**	**Course Code: 24MES9105T**
Total Lecture hour 60		**Hours**
Unit I	Indian banking system as on the eve of bank nationalization, structure and development of commercial banks in India since 1969. Branch expansion programme and policy. Deposit mobilization and Sectoral allocation of bank credit. Concept of social and Mass banking. Priority sector advances and Advance to the neglected sections of the society.	16
Unit II	Financial sector reforms- Context, need and objectives. Implementations of the Narsimham Committee recommendations, Issues in financial reforms.Rural banking – Overall structure and review of the contribution of major credit cooperatives, Commercial banks and Regional rural banks including NABARD.	17
Unit III	Human resource development – Present and future HRD needs for bank employees in India. Recruitment, training and appraisal of bank employees, Khandelwal Committee recommendations on human resource in public sectors banks.	12
Unit IV	The reserve bank of India – Functions and role .Autonomy of the RBI. Liquidity management, Monetary policy- Goals, Targets and Indicators. RBI' s Monetary Policy-Objectives and Techniques. Impact of RBI'S monetary policy on economic growth and Price stability.	15
Reference Books		
1	S.B. Gupta : Monetary Planning for India (latest Ed.)	
2	K. Rao: Management of Commercial Banks	
3	L.M. Bhole : Impacts of Monetary Policy.	
4	Harendra Badhav (ed.): Challenges to Indian Banking Competition. Globalization and Financial Markets Macmillan	
5	N.S. Yher: Non-Performing Advances in Banks, Skylark, New Delhi.	
6	Report of the Committee (Narsimhan) on the Financial System, Nov., 1991	
7	Raghuram Rajan Committee Report on Financial Sector Reforms, Planning Commission, New Delhi.	

8	R.B.I. Report on trend and Progress of Banking in India (Latest Edition).
9	Hanson and Kathuria (ed.): A financial Sector for the 21st Century, Oxford. University Press.
10	Y.V. Reddy, Monetary and Financial Sector Reforms in India, UBSPD. New Delhi.

Course Title:	Labour and Industrial Relation	Course Code: 24MES9106T
Total Lecture hour 60		**Hours**
Unit I	LabourEconomic Importance, Old and new theories; Theoretical and institutional labour Economics; Theory of individual labour supply and demand for labour; Wage determination; Functions and Characteristics of labour market with special reference to developing economies.Non competiting groups and segmentation in labour markets; Rural labour market and rural- urban migration; Todaro Harris hypothesis; Investment in rural capital.	16
Unit II	Definition of working force and labour force; Concept of Unemployment and Under-employment; Types of unemployment; Estimates of unemployment in India and Rajasthan. Employment in organized and industrial sectors in India-its size, growth and characteristics. Government and labour market; Labour legislation and social security; State reputation of wages	17
Unit III	Minimum wages for industrial and Agricultural workers; Wage and income policy. Labour Unions their role and functions; Labour unions and collective bargaining economic impact of unions.Trade Union movements in USA, Russia and India, Industrial relations- factors determining industrial relations; Collective bargaining in IndiaIndustrial disputes and grievances, causes of unrest;	12
Unit IV	Machinery for industrial peace; Conciliation, mediation and arbitration, Industrial disputes in India since 1980, Critical study of existing machinery of industrial relations in India.Workers participation in ownership and management-concepts and Indian experience; Industrial Labour Organization- functions and role, India and ILD; Industrial Labour and Industrial Relations in Rajasthan.	15
Reference Books:		
1	Dunlop: Industrial Relations system (Harvard Business School Press)	
2	B.C. Roberts: Trade Union in a free society (Hutchinson & Company)	
3	R.N. Subramaniam: Labour Management Relations in India	
4	V.G. Mhetras: Labour Participation in Management (Manaktalas)	
5	Mary Sur: Collective Bargaining (Vikas Publishing House).	
6	D.N. Mongia: Reading in Indian Labour and Social Problems	
7	Jalan and Bimal: Economics of Labour Policy.	
8	McConnell C.L. and S.L. Brue: Contemporary Labour Economics, McGraw-Hill Co.	

Semester - II

Course Title:	Micro Economic Theory-II	Course Code: 24MES9201T
Total Lecture hour 60		**Hours**
Unit I	Oligopoly market: Non-collusive models of Cournot, Bertrand, Edge worth, Chamberlin and Stackelberg. Cartels and Price leadership. Baumol's model, Marris's and Williamson's managerial theory. Full cost pricing, Bain's limit pricing theory.	16

Unit II	Factor pricing under perfect and imperfect competition: Determination of wages, rent, interest and profit, Macro theories of distribution- Ricardo, Marx, Kalecki and Kaldor's models.	17
Unit III	Game theory;Theory of distribution: Neo-classical approach, Marginal productivity theory, Euler's theorem. Technical progress and Factor shares. Welfare economics: Pigouvian welfare economics, Pareto optimality. Kaldor – Hicks compensation principle. Theory of second best, Scitovskypradox; Little's welfare criterion	12
Unit IV	Social welfare function and theory of social choice- Rawl, Bergson- Samuelson and Arrow's theorem. externalities, Public goods and market failures. Asymmetric information – Market Signaling Moral hazard, The principal – agent problem.	15

Reference Books:

1	A. Koutsoviannis: Modern Micro Economics, MacMillan, London
2	H.L. Ahuja: Advanced Economic Theory, S. Chand & Co., New Delhi
3	H.L. Ahuja: Uchchatar Arthik Siddhant (Hindi) S. Chand & Co., New Delhi.
4	D. Salvatore: Micro Economic Theory, Schaum's Outline Series, Third edition, McGraw-Hill, Inc. New Delhi
5	D. Salvatore: Micro Economic Theory, Harper Collins
6	J.M. Joshi: Theory of Value, Distribution and Welfare (Vikas, New Delhi)
7	K.C. Roy Choudhary: Micro Economics, Tata McGraw Hill Publishing Co., New Delhi P.R.G Layard and A.A Walters: Micro Economic Theory McGraw Hill Publishing Co., New Delhi
8	Hal R. Varian: Micro Economic Analysis (Indian Print), Affiliated East West Press Pvt. Ltd., New Delhi.

Course Title:	**Macro Economic Theory-II**	**Course Code: 24MES9202T**
Total Lecture hour 60		**Hours**
Unit I	Determination of Output and Employment – The Classical and Keynesian Models; Multiplier-Concept, Working, Static and Dynamic Multiplier; Aggregate Supply and Aggregate Demand Model- Neo-Classical Three Sector Model and Keynesian Three Sector Model.	16
Unit II	IS-LM Model- The Interaction of Real and Monetary Sectors of the Economy, Keynesian Version of the IS-LM Model, Neo Classical Version of the IS-LM Model, Fiscal Policy and Crowding Out Effect; Role and Relative Effectiveness of Fiscal and Monetary Policies.	17
Unit III	Open Economy Macroeconomics- Trade Balance, Exchange Rates and International Monetary System: Mundell- Fleming Model: Analysis of Fiscal , Monetary and Trade Policies under Imperfect Capital Mobility and Perfect Capital Mobility with Fixed and Flexible Exchange Rate Systems.	12
Unit IV	Phillips Curve Analysis; Expectation Augmented Phillips Curve Analysis; Natural Rate of Unemployment Hypothesis. Role of RBI in Inflation Control, Credit Control and Economic Stability. New Classical Macroeconomics – The New Classical Critique of Keynesian Micro Foundations. The Real Business Cycle Theory; Rational Expectations- Solution of a Simple Macroeconomic Model with Rational Expectations and Economic Interpretation.	15

Reference Books:

1	Gardner Ackley: Macro Economic Theory (Latest Ed.) (Macmillan, New York).
2	Martin J Bailley: National Income and the Price Level, Chap. 2 and 3
3	Edward Shapiro: Macro Economic Analysis (Latest Ed.) (Harcourt Brace Jovanovich)
4	K.C. Rana and K.N. Verma: Macro Economic Analysis (Vishal Publishers).
5	William H. Branson and James M. Litvack: Macro Economics (Harper and Row).
6	Rosalind lavacic: Macro Economics (Macmillan)
7	M.J.C. Surry (Ed): Macro Economic Theories (Tata MacGraw Hill)

8	R.F. Henson: Guide To Keynes (Tata McGraw-Hill)
9	Dadle Dillard: A Guide to Keynes (Tata McGraw-Hill)
10	M.K. Evans: Macro Economic Activity (MacMillan Publication)
11	M.G. Muller(Ed) Readings in Macro Economics, 1966 (Edward Elgar Publishing)
12	Reserve bank of India: Leports on Currency and Finance 4. Reserve Bank of India: Annual Reports-1998 onwards
13	Reserve Bank of India: Monthly Bulletin
14	J.M. Keynes: The General Theory of Employment, Interest and money (MacMillan Cambridge University Press)
15	Barret: Macro Economic Policy (Prentice Hall)
16	Uma Dutta Roy Choudhary: National Income Accounting, Macmillan India Ltd. Delhi
17	H.L Ahuja: Samashti Arthshastra (Hindi), Macro Economics (Eng)
18	Rudi Dornbush, S Fisher and R. Startz: Macroeconomics, Tata McGra- Hill Edition, 2000
19	Raghbendra Jha: Contemporary Macroeconomics (Edward Elgar Publishing)

Course Title:	**Quantitative Methods For Economics-II**	**Course Code: 24MES9203T**
Total Lecture hour 60		**Hours**
Unit I	Measures of central tendency, Dispersion, Skewness, Measurement of Inequality Lorenz Curve and Gini Coefficient.	16
Unit II	Kurtosis, Correlation, Simple Regression and Interpretation of Multiple linear Regression Equation.	17
Unit III	Analysis of Time Series and Curve Fitting, Index Numbers Probability, Mathematical Expectation. Probability Distributions (Binomial , Poisson, and Normal).	12
Unit IV	Sample, Sampling and Survey Methods, Testing of Hypothesis. Application of Z, t, F & X^2 tests, Association of Attributes, Analysis of Variance	15

Reference Books:

1	S.P Gupta: Statistical Methods, Sultan Chand & Sons, New Delhi.
2	B.C Mehta and G.M.K. Madnani: Mathematics for Economics, Sultan chand& sons, New Delhi.
3	Kailash Nath Nagar: SankhiyikikeMool Tatva (Hindi) Meenakshi Prakashan, Meerut
4	Laxmi Narain Nathuramka: Arthshastra Mein Ganit ke Prayog (Hindi), College Book House, Jaipur
5	R.G.D Allen: Mathematical Analysis for Economists, MacMillan, London.
6	Alpha C. Chiang: Fundamental Methods of Mathematical Economics, McGraw-Hill, Tokyo.
7	F.F Croxton, D.S Cowden & S. Klein: Applied General Statistics, Prentice Hall of India. New Delhi.
8	A.L. Nagar and R.K. Das: Basic Statistics, Oxford University Press.
9	A.L. Nagar & P.D. Sharma: Statistical Methods of Economic Analysis, S.Chand& Co. New Delhi.
10	Edward T. Dowling: Mathematics for Economists, Schaum's Outline Series, McGraw-Hill Book Co., New Delhi.

Course Title:	**Research Methodology For Economic Analysis**	**Course Code: 24MES9204T**
Total Lecture hour 60		**Hours**
Unit I	Research a scientific approach :Types of Research, Research Methods versus Research Methodology, Criteria of Good Research, Problems Encountered by Researchers in India	16
Unit II	Various Stages of a Research : Identifying a Research Problem, Literature Review and tools for reference collection, Critical Evaluation of Literature Review, Formulation of hypotheses, Research design, Data analysis, Interpretation of result	17
Unit III	Research Design: Meaning of Research Design, Necessity of Research Design, Framework and parameters, Approaches to Research Design: Qualitative and Quantitative, Types of Research Design: Explanatory, Descriptive, Diagnostic. Experimental, Exploratory and	12

	Hypothesis Testing Design.	
Unit IV	Methods of Data Collection: Collection of Primary Data, Observation, Interview Methods and Collection of Data through Schedules, Difference between Questionnaires and Schedules, Collection of Secondary Data, Selection of Appropriate Method for Data Collection, Case Study Method.	15
Reference Books:		
1	Bryman, A. (2016). Social Research Methods. Oxford University Press.	
2	Bordens, K. S., & Abbott, B. B. (2002). Research design and methods: A process approach. McGraw-Hill	
3	Bairagi, V., &Munot, M. V. (Eds.). (2019). Research methodology: A practical and scientific approach. CRC Press.	
4	Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications	
5	Goode and Halt - Methods in Social Surveys and Research	
6	JK Sharma- Business Statistics	
7	William Cyrus Navidi. Barry J. Monk Elementary Statistics (3rd Edition)	
8	Kothari C. R.. Research Methodology: Methods and Techniques (Second Revised Edition).	

Course Title:	**Agricultural Economics**	**Course Code: 24MES9205T**
Total Lecture hour 60		**Hours**
Unit I	Agriculture in growing economy, changing importance of agriculture; Subsistence\ traditional agriculture and its modernization; Interdependence between agriculture and industry Some empirical evidence: Institutional change and technological changes, Farming Systems traditional commercial, cooperative, collective and state farming; Production functions in agriculture, resource use efficiency.	16
Unit II	Farm Size and Production, relationship in Indian agriculture; farm Budgeting, Concept of cost; Supply of individual crops and aggregate supply: Supply price relationship Factors of production, Characteristics of factor markets; Inter-linkages between land,labour and capital markets; Traditional agriculture; Tenancy and crop sharing;Mobility of land and segmentation in labour markets, Role of capital and agricultural credit, Organized and Unorganized capital markets; Uncertainty and crop insurance,Agricultural markets and marketing efficiency.	17
Unit III	Behaviour of agricultural prices; Demand and supply of agricultural products and cobweb cycles; Prices and income stability; Market and Marketable surpluses; Role ofPublic, price and distribution policies, Stabilization and support policies	12
Unit-IV	Terms of trade between agriculture and non-agriculture: Agricultural price policy in India Agricultural growth in India, Inter-regional variation in growth of output and productivity; Agricultural growth in Rajasthan, Cropping pattern changes in India Institutional changes Land Reforms, credit structure and marketing, Supply of inputs- Irrigation, power, seed fertilizer; Pricing of inputs; Problem of mobilization of resources from agriculture	15
Reference Books:		
1	Bruce L. Gardener and Gordon C. Rausser (Eds.): Handbook of Agricultural Economics, Vol.- IA , Agricultural Production, Amersterdam, Elsevier Sciences B.V., 2002.	
2	E.D. Heady and J.L. Dillon: Agricultural Production Functions	
3	T.W. Shultz: Transforming Traditional Agriculture	
4	Pranab K. Bardhan; Land, Labour and Rural Povery in India (Columbia University Press)	
5	Krishna Bhardwaj: Production and Conditions in Indian Agriculture (Cambridge University Press).	
6	C.H.H. Rao: Agricultural Production, Costs and Returns in India (Asia Publishing House)	
7	D.S. Tyagi and G.S. Bhalla: Agricultural Development in IndiaEicher Karl and Lawrence Witt (Eds.): Agriculture	

	and Economic Development, New York McGraw Hill Co., 1964.
8	Ghatak Subrata and Ken Ingersent : Agriculture and Economic Development, Harvestor Press Ltd., London, 1984.
9	Southworth Herman and Bruce Johnston (eds): Agricultural Development and Economic Growth , Cornell University Press, New York , 2011.
10	Tsakok, Isabelle (2011): Success in Agricultural Transformation: What It means and What Makes It Happen, Cambridge University Press, New York, 2011.

Course Title:	**Demography**	**Course Code: 24MES9206T**
Total Lecture hour 60		**Hours**
Unit I	Mortality Measures- Grade and Specific rates; Life tables; Factors affecting mortality; Mortality change and population growth; Fertility measures - Crude and specific rates, gross and non reproductive rates; Factors affecting fertility, study of fertility attitudes by special survey, mortality rate, fertility rate, reproductive rate and population growth in India.	16
Unit II	Composition of Population- Social economic coraposition; relationship of age, sex and Other compositional traits to economic and special organization; Composition of Population in India; Effect of birth death and migration rates upon population.Basic Principles of measurement of population growth- Estimates, Census, Vital registers and records of migration; Continuous Population registration; Methods of population presentation; Projection of population in IndiaEconomically active population- Basic concepts and definitions;	17
Unit III	Impact of demographic process on the composition and size of the labour force, occupation and industrial composition of work force in relation to regional and international differences in economic development; Female participation in workforce; A study of occupation, Composition and female participation in India; Concept of Human Development.	12
Unit IV	Theories of demographic transition; Employment and Manpower planning - its significance and problems; Measurement, Incidence and implications of unemployment and under employment with special reference to India Implication of population change for capital formation and employment in developing countries; Indian Census, family planning; NFH surveys (objectivesand finding)	15
Reference Books:		
1	G.W. Barclay: Techniques of Population Analysis (John Wiley & Sons)	
2	D.K. Bogue: Principles of Demography	
3	Ccale and Hoover: Population Growth and Economic Development in Low Income Gountries (Literary Licensing LLC)	
4	O.S. Srivastava: Arthik Evam Samajik Jananki shastra (Hindi) (Vivek Prakashan)	
5	Jeevan Chandra Pant: Jananki (Hindi)	
6	Mahboob-ul-Haq: Reflections in Human Development	
7	Human Development Report (Latest) (UNDP)	
8	National Family Health Survey 1 and 2	

Semester-III
Economics of Development and Growth

Course Objectives:
This course offers an in-depth exploration of the complex and evolving concept of development. It examines the historical and theoretical progression of development, growth, and change, focusing on key components such as land, labour, physical and human capital, technological innovation, scale, and organizational structure. Special attention is given to the principles and challenges of sustainable development, including its definitions, indicators, and policy responses. By studying foundational theories of economic development—such as the interplay between agriculture and industry and various growth models—students will develop a critical understanding of the relationships among industrialization, urbanization, and development strategies.

Course Outcomes:
COI: Students will gain a deep understanding of the evolving concepts of development, growth, and change, including the core values of development as articulated by Goulet and Sen. They will critically analyse various measures of development and their limitations, and explore alternative indicators like the PQLI and HDI.
CO2: Students understand the principles of sustainable development, including its conceptualization, concerns, indicators, and potential remedial measures.
CO3: Students will be able to identify and analyse the issues of growth, poverty, and inequality in less developed countries (LDCs), understanding their impacts on development and exploring potential solutions to these challenges.
CO4: Students will gain a deep understanding of input-output analysis in planning, the financing of economic development, and the role of international trade.

Course Title:	**Economics of Development and Growth**	**Course Code: 24MES9301T**
Total Lecture hour: 60		**Hours**
Unit I	Understanding Development: Dividing the world and levels of development (Development as an evolving concept i.e. Development, Growth and Change; Goulet's three core values of development; Sen's Conception of Development; Income/Output based measures and their inadequacies; PQLI and HDI as indicators of Development). Ingredients of development- Land, labour, Physical and Human capital, Technological change, Scale and Organization.	**15**
Unit II	Sustainable Development (conceptualization, concern, indicators and remedial measures). Concept, measures and problems of growth, poverty and Inequalities in LDCs and their impact on development.Theories of Economic Development: Agriculture-Industry Interface: Interdependence between agriculture and industry; industrialization and urbanization (The models of Lewis, Fei and Ranis and Todaro).	**15**
Unit III	The Balanced Growth Doctrine (Review of Rosenstein, Nurkse and Lewis); The Strategy of Unbalanced Growth (Hirschman's version), and the reconciliation of the two.Project evaluation criteria: Internal rate of return, net present value and cost-benefit analysis, social discount rate, shadow prices of capital, unskilled labour and foreign exchange. Choice of techniques, Capital-output ratio.	**15**
Unit IV	Applications of Input-Output Analysis in Planning. Financing of economic development: domestic and external resources, Two-gap model. International trade and development. Types and approaches of planning. Plan models of India, past performance and current issues of Indian planning.	**15**
Reference and Reading Books:		

1. Agarwala, A. N. and S. P. Singh (ed s.) (1977): The Economics of Underdevelopment, Oxford University Press, New Delhi.
2. Eicher, Carl and Lawrence Witt (1970) : Agriculture in Economic Development, New York,
3. McGraw Co. Ranis, Gustav and John C. H. Fei: A Theory of Economic Development, American Economic Review, September pp. 533-65, 1961.
4. Meier, Gerald M. and James E. Raunch (2006) : Leading Issues in Economic Development,Eighth Edition, Oxford University Press, New York.
5. Ray, Debraj (2004) : Development Economics, Seventh Impression, OxfordUniversity Press, New Delhi.
6. Thirlwall, A. P. (2006) : Growth and Development, Eighth Edition, Palgrave Macmillan, NewYork.

International Trade Theory

Course Objective

This course traces the development of international trade theories, from Mercantilism to Classical Trade Theory, with a focus on Absolute and Comparative Advantage as presented by Smith, Ricardo, Mill, and Haberler. It emphasizes the empirical evaluation of these theories and examines the impact of trade policies—such as tariffs, quotas, and trade agreements—on economic performance. The course aims to equip students with the knowledge necessary to understand and contribute to the formulation of effective trade policies that enhance economic growth and societal welfare.

Course Outcomes

COI: Students will learn to explain the evolution of international trade theories from Mercantilism to Classical Theory, including the concepts of Absolute and Comparative Advantage.
CO2: Students will learn to apply analytical tools such as the Production Possibility Frontier, Community Indifference Curves, and Offer Curves to interpret trade patterns and outcomes.
CO3: Students will learn about key trade theorems like the Factor Price Equalization and Stolper-Samuelson Theorems, analyse the impact of factor endowments, and evaluate empirical findings such as the Leontief Paradox and the Heckscher-Ohlin theory.
CO4: Students will analyse the relationship between economic growth and international trade, considering factors such as the growth of factors of production, technical progress, and the implications of international factor movements (labour and capital).

Course Title:	**International Trade Theory**	**Course Code: 24MES9302T**
Total Lecture hour: 60		**Hours**
Unit I	Early Trade Theories: Mercantilism, Classical Theory of Trade, Absolute Advantage and Comparative Advantage- Views of Adam Smith, Ricardo, Mill, Haberler, Empirical Testing of Classical Theory. Standard Theory of Trade- Production Possibility Frontier, Community Indifference Curves, Offer Curves; Trade Indifference Curves.	**15**
Unit II	Terms of Trade and Gains form Trade, Factor Endowments and Heckscher-Ohlin Model-Factor Price Equalization Theorem, Stolper- Samuelson theorem, Metzler Paradox and Rybczynski Theorem, Empirical Verification of H-O Theory, Leontief Paradox.	**15**
Unit III	Meade's General Equilibrium in trade, International Trade under Imperfect Competition in Goods Markets; Intra -Industry Trade, Economic Growth and International Trade- Growth of Factors of Production, Technical Progress, Immiserizing Growth.	**15**
Unit IV	International Factor Movements- Labour and Capital Movements and their Effects, Brain Drain, Multinational Corporations and their Role. Free Trade versus Protection, Instruments of Protection and their Effects, Tariffs (Partial and General Equilibrium), Quota, and other Non- Tariff Barriers.	**15**

Reference and Reading Books:

1. J. Bhagwati: International Trade, Cambridge University Press, London.
2. R.J Carbough: International Economics, Cengage Learning. 13th Edition.
3. D. Salvatore: International Economics, PHI, New York.
4. Ranaand Verma International Economics, Vishal Publishing House Ludhiana (Hindi and English).

Public Economics

Course Objective:

The objective of this course is to highlight the management of government revenue and expenditure that encourages economic growth, equitable distribution of wealth and efficiental location of resources. It further addresses market failure and solutions to establish the economy for economic welfare of the society. This course provides students with the knowledge to analyze, evaluate and formulare policies that enhance economic efficiency, improves social welfare and promote equity through effective resource management and govemment interventions.

Course Outcome:

COI: Stundents will explore the government's multifaceted role in economic activities, including resource allocation, income redistribution, and economic stabilization.
CO2: Students will analyze positive and negative externaäties, evaluting corrective measures to enhance social welfare.
C03: Students will also study different types of public budgets, such optimal, balanced, and deficit financing budgets, while examining techniques like performance and zero-base budgeting.
CO4: Students will explore hypotheses regarding public expenditure and evaluate its impact on production and distribution using models like Bowen, Lindahl, Samuelson, Wagner's Law, and the Weisman Peacock Hypothesis
C05: Students will also analyze taxation canons and various approaches to tax burden division, assessing tax incidence, taxable capacity, and principles of taxation justice.

Course Title:	**Public Economics**	**Course Code: 24MES9303T**
Total Lecture hour: 60		**Hours**
Unit I	Nature and Scope of Public Finance. Public Finance and Private Finance, Economic Analysis of Public policy, Role of Government in the Economic Activity Allocation, Distribution and Stabilization Functions, Private, Public and Merit Goods. Theory of Externalities: External Benefits and Cost-Correction of Externalities, Principle of Maximum Social Advantage.	**15**
Unit II	Public Budgets: Kinds of Budget , Optimal Budgeting, Balanced and Unbalanced Budgets ,Deficit Financing. Performance and Programming Budgeting. Zero Base Budgeting. Public Expenditure :Hypothesis and evaluation, Effects of Public Expenditure on Production and Distribution, Bowen, Lindahl and Samuelson's Models, Wagner's Law of Increasing State Activates, Weisman Peacock Hypothesis.	**15**
Unit III	Public Revenue: Canons of Taxation, Different Approaches ,the Division of Tax Burden, Incidence and Effects of Taxation, Taxable Capacity, Justice in Taxation, Benefit & Ability to Pay Approaches. Theory of Optimal Taxation :Equal-Absolute, Equal-Proportional, Equal-Marginal and least Aggregate Sacrifice Principles, Buoyancy and Elasticity of a Tax.	**15**
Unit IV	Direct and Indirect taxes - Effects of Direct Tax on Production (viz. Labour Supply and Saving Rate) and Distribution, Effects of Indirect Tax on Production, Progressiveness of a Tax System and its Measurement, Shifting and Incidence of taxes under Monopoly and Perfect Competition.	**15**
Reference and Reading Books: 1. R.A. Musgrave and P.B. Musgrave Public Finance in Theory and practice, McGraw-Hill		

2. R.A. Musgrave: Theory of Public Finance, McGraw-Hill.
3. S. Gangoli: Public Finance. The World Press Private Limited.
4. John Callis and Phillip Jones, Public Finance and Public Choice, Oxford University Press.
5. Harvey Rosen, Public Finance, McGraw Hill Publications.
6. David N. Hyman, Public Finance A Contemporary Applications of Thenry to Policy.

Indian Economy

Course Objectives

This course aims to equip students with essential economic issues of Indian economy. It abo provides an analytical approach regarding issues and problems of Indian Economy & various public policies. Simultaneously, it generates a foundation of answer writing in competitive exams anel develops critical thinking regarding poverty, unemployment, population and HDI. It creates deep understanding about primary and secondary sectors of Indian economy.

Course Outcome

CO1: Students will learn about various challenging contemporary issues like natural resources, population, poverty, unemployment and HDI and concerning public policies
C02: Course Outcome: Students will understand agricultural development of India, problems of Agriculture and public policies regarding agriculture
C03: It will enhance the knowledge about industrial development since independence, souces of industrial finance, significance of foreign capital for Indian economy and reforms of public sector undertakings.

Course Title:	**Indian Economy**	**Course Code: 24MES9304T**
Total Lecture hour: 60		**Hours**
Unit I	Natural Resource in India- Land, water and minerals population- Size Composition; Quality and Growth Trends. Characteristics of Indian Population through Recent Census, Population Policy and Economic Effects of Population Pressure.	**15**
Unit II	Poverty. Unemployment and human development during plan Period- Appraisal of Government Measure India's Human Development Record in Global Perspective. Current flagship schemes of Central Government.	**15**
Unit III	Agricultural Development in India-Institutional Aspects-Land Reforms, Green Revolution, Technological Aspects Agricultural inputs and Shifts in Production Function, Agricultural Cost and Price Policy, Agricultural Marketing and Credit, Food Policy and Security, Subsidy and Public Distribution System; Capital Formation in Indian Agriculture- A Need for Second Green Revolution.	**15**
Unit IV	Industry- Strategy of Industrial Development and Industrial Policy Reforms, Small Scale and Cottage Industries, Reservation Policy Relating to Small Scale Industries.Sources of Industrial Finance-Banks, Share Market. Insurance Companies. Pension Funds, Non-Banking Sources and FDI, role of Foreign Capital for Direct Investment and Portfolio Investment, Public Sector Reforms, Privatization and Disinvestment.	**15**
Reference and Reading Books: 1. Dutt and Sundarame Indian Economy, S. Chand (Latest Edition) (Hindi and English). 2. AN. Agrawal Indian Economy, New Age International Pub (P) Limited. (Latest Edition) (Hindi and English). 3. Laxmi Narayan Nathuramka, BhartiyaArthashastra, College Book House, Jaipur (LatestEd. 4. Mishra &Puri: Indian Economy, Himalaya Publishing House, (Latest Ed.) (Hindi and English),		

Mathematical Economics

Course Objectives

By studying this course, students will be equipped with critical analytical tools to understand and predict consumer behaviour and firm decision-making processes. This knowledge is directly applicable in various fields such as economics, business, finance, and public policy. For instance, understanding demand.functions and price elasticity helps in making informed decisions related to

pricing strategies and market analysis. The insights gained from the theory of the firm, including production functions and cost optimization, are crucial for roles in management, consulting, and entrepreneurship. Additionally, the ability to analyse market equilibrium under different competitive scenarios is valuable for those interested in regulatory economics, economic planning, and strategic business decisions.

Course Outcomes

CO1: Students will analyse utility functions, indifference curves, and demand functions, understanding consumer choices and elasticity implications..

CO2: Students will apply advanced demand theories like the Slutsky equation, derive labor supply functions, and understand consumer surplus

CO3: Students will analyse production functions, calculate elasticity, and evaluate firm optimization behaviour.

CO4: Students will assess market equilibrium under perfect competition, understanding externalities, cost conditions, and tax impacts on output and prices.

Course Title:	**Mathematical Economics**	**Course Code: 24MES9305T**
Total Lecture hour: 60		**Hours**
Unit I	Theory of consumer Behaviour- Concavity of a utility Function; Convexity of an indifference curve; Maximization of utility; Derivation of demand functions- Ordinary and Compensated demand function; Elasticity relations in demand theory-Engel Aggregation Condition and Cournot Aggregation Condition. Income and Leisure - Derivation of Labour supply function.Slutsky Equation- 2 and n- Commodity cases, elasticity form and important results.Type of Utility functions- separable and additive, homogeneous and homothetic, direct and indirect; Roy's Identity; Linear Expenditure System.Restrictions on demand functions.	**15**
Unit II	Theory of firm: Production function - A well behaved production function; Cobb-Douglas and CES production Functions. Homogeneous production function; Optimization behaviour of a firm- profit maximization, constrained cost minimization and constrained output maximization.Elasticity of substitution (s) derivation of its expression and calculation of value of s for CDPF and CESPF; Special cases of CESPF.Deviation of Cost and input demand function.	**15**
Unit III	Perfect Competition; Market demand and supply function; Determination of price and output of a firm; Effects of specific and advalorem taxes; Monopoly: Profit Maximization and sales revenue maximization; Multiplant Monopolist, price discrimination, effect of various taxes (Lumpsum tax, profit tax, specific tax and Ad- Valorem tax) on output and price of a monopoly firm.	**15**
Unit IV	Macro Economic Models; Keynesian theory of income determination, concept of Multiplier, Multiplier - Accelerator interaction; Linear Programming- Simplex Method: Problem of Degeneracy and Mixed Constraints Duality Theorems, Complementary Slackness Conditions. Application of Linear Programming in Economics.	**15**

Reference and Reading Books:

1. J.M. Henderson and R.L. Quandt: Micro Economic Theory: A Mathematical Approach, McGraw Hill, Londón.
2. RGD Allen, Mathematical Economic.
3. B.C. Mehta: Mathematical Economics: Micro Economic Models. Sultan Chand & Sons, New Delhi.
4. Alpha C. Chiang: Fundamental Methods of Mathematical Economics, McGrawHill, Kagakusha, Tokyo.
5. R.G.D. Allen, Marco Economic Theory: A Mathematical Treatment, McGrawHill, London.
6. Michael K. Evans: Macro Economic Activity: Theory, Forecasting and control.
7. B.C. Mehta and G.M.K. Madnani: Mathematics for Economists, Sultan Chand & Sons, New Delhi.
8. H.S. Agrawal: KismatSiddhantonkaGanitiyaVishleshan, R.B.S.A. Publishers, Jaipur.

Dy. Registrar
Pandit Deendayal Upadhyaya
Shekhawati University,
Sikar(Rajasthan)

Econometrics

Course Objectives:
This course provides the basic knowledge of the econometrics concepts and its methodological aspects. Students will be able to formulate econometric model to analyze data and then would be able to establish any cause-effect relationship in their preferred areas of interest.

Course Outcome:
CO1: This course will help students to conceptualize the basics of econometrics and they will earn to estimate linear regression models using Ordinary Least Square method and make inferences about population parameters.
CO2: They will understand the detection, consequences and remedial measures of violation of classical assumptions. Such as the problem of Multicollinearity, Auto- correlation, Heteroscedasticity& Specification problems. This course will familiarize the students with various qualitative regression techniques such as the dummy variable technique and Logit, Probit & Tobit models.
CO3: Students will learn the differences between Auto regressive and Distributed lag models and various approaches associated with these models.

Course Title:	**Econometrics**	**Course Code: 24MES9306T**
Total Lecture hour: 60		**Hours**
Unit I	Nature and scope of Econometrics, Methodology of Econometric Research, Random Variables, Statistical Inference. Simple linear regression Model (2 variables), Estimation of regression parăameters using Ordinary Least Squares (OLS)method and maximum likelihood method. Properties of estimators, Test of significance, confidence interval and analysis of variance. Various functional forms of Regression models.	**15**
Unit II	General linear model (n variables, matrix notation)- Estimation of regression parameters by least squares methods; Properties of estimator; Test of significance; Aitken Estimator.Applied Econometrics: Estimation of Demand, Cost of Production Functions; Forecasting.	**15**
Unit III	Violation of basic assumptions- Autocorrelation, Multicollinearity, Heteroskedasticity and Specification Error, D-W statistics. Distributed lag Models - Koyck approach, Adaptive Expectations. and Partial Adjustment Models, Almon Approach. Dummy variable.	**15**
Unit IV	Simultaneous equations model: Structural form and reduced form; Identification Problem; Derivation of Order and. Rank conditions; Eatimation of simultaneous equations model- Ordinary least squares (OLS), Indirect Least Squares (ILS) and two stage least squares (2 SLS) methods.	**15**
Note: Use of non-Programmable calculator is permitted. **Reference and Reading Books:** 1. J. Kmenta: Elements of Econometrics (Macmillan) 2. DamodarGujrati: Basic Econometrics (McGraw- Hill) 3. J. Johnston: Econometric Methods (3rd edition) (McGraw-Hill) 4. G.S. Maddala: Econometrics (McGraw-Hill)		

Environmental Economics

Course Objectives:
This Course aims to equip students with the knowledge and analytical skills necessary to understand, evaluate and propose effective solutions to environmental issues through the lens of economics. It develops an understanding of fundamental economic concepts such as supply and demand, market failure, externalities, and welfare economics, and applying these concepts to environmental issues. It provides students with an understanding to analyze various environmental problems from an economic perspective, including pollution (air, water, soil), natural resource depletion, climate change, biodiversity loss, and ecosystem services degradation. It introduces the concept of sustainable development and how economic principles can contribute to achieving environmental sustainability while promoting economic growth and social well-being. This course will develop interdisciplinary

thinking by integrating concepts from ecology, biology, sociology, and political science with economic analyses to address complex environmental challenges.

Course Outcome:

CO1: Students will understand basic economic principles and theories, particularly as they apply to environmental issues.

CO2: To critically evaluate existing environmental policies and propose new policy measures or modifications based on economic efficiency, equity considerations, and environmental effectiveness.

CO3: Students will learn methods for valuing environmental goods and services that are not traded in markets, such as ecosystem services, biodiversity, and environmental amenities.

CO4: Students will be able to integrate economic concepts with insights from other disciplines such as ecology, biology, sociology, and political science to develop holistic solutions to complex environmental challenges.

Course Title:	**Environmental Economics**	**Course Code: 24MES9307T**
Total Lecture hour: 60		**Hours**
Unit I	Classification of resources: Renewable and Non- renewable. Biotic and Abiotic, Exhaustible and Non-exhaustible Resources. Environmental Economics: Meaning, Scope, Positive versus Nonnative Perspective. Relation of Environmental Economics with Economics, Ecological Economics and Resource Economics.	**15**
Unit II	Sustainable Development: Concept, Objectives, Indicators, Strong and Weak sustainability Development and Environment: Environmental Kuznets Curve, Trade and Environment. Air Pollution : Types Of Pollutants and their Impact. Water Pollution: Concepts of BOD and COD, PH values.Fluoride, Fertilizer use.Land Degradation: Problem of Solid Waste Disposal and Contamination; Problem of Salinity and Water logging.	**15**
Unit III	Afforestation and Deforestation, Significance of Social Forestry. Deflection of Ozone Layer: Green House Effect, Global Warming and Climate Change, Acid Rain, Urban Pollution and Urban Health. Economic Theory and Measurement of Environmental Benefits. Demand for Environmental Service-Willingness to Pay and Willingness to Accept.	**15**
Unit IV	Alternative Approaches and Methods of Environmental Valuation-Revealed Preference and Stated Preference Method-Hedonic Pricing. House hold Production Function, Travel Cost Method, Defensive Cost and Contingent Valuation Method. Green Accounting: Flaws in Conventional System of National Income Accounts, Requisite Modifications to National Income Account.	**15**

Reference and Reading Books:

1. 1. Bhattacharya. R.N (2001), Environmental Economics- An Indian Perspective, Oxford University Press, Delhi.
2. 2.Hanley. N., J.F Shogren, and B White (2006). Environmental Economics: In Theory and Practice, Oxford University Press.
3. 3.Kolstad, C. D. (2003) Environmental Economics, Oxford University Press
4. 4. Sengnpta, Ramprasad (2003). Ecology arid Economics: An Approach to Sustainable Development, Oxford University press
5. 5.Singh, K. and A. Shishodia (2007), Environmental Economics: Theory and Applications Sage Publications, New Delhi.
6. 6.Ramprasad Sengupta (2012), Ecological Limits and Economic Development, Oxford University Press.

Industrial Economics

Course Objective:

This is a course for Industrial economics that deals with basic concepts of industry, market products, industrial locations, and market structure. The basic objective of the course is to enable students to understand the concept of industrialization as a source of economic development and understand the structure of markets. The focus of the course is split equally between economic theory and practical perspective. The emphasis is on understanding how the theoretical tools can be used to analyze real-world issues concerning industrial development.

Course Outcomes:

C01- The student will be able to understand the significance of industrialization in a developing economy.

C02- The student will understand the nature of Linkages between sectors of the economy and analyze various factors responsible for the choice of location of industries.

C03- The Student will grasp an understanding of the structure of industrial enterprise.

C04- Will be able to acknowledge various management models of sales and profit

C05- Will gain a deep insight into market conduct under rivalry and collusive oligopoly and maximization comprehend market performance.

Course Title:	**Industrial Economics**	**Course Code: 24MES9308T**
Total Lecture hour: 60		**Hours**
Unit I	Industrialization and Development, Interdependence of Industrial Sectors; Backward and Forward Linkages. Location of Industries. Theories and Measures of Industrial Localization (Sargent F. & A. Weber). Localization of Industries in India. Industrial Project Selection Criteria.	**15**
Unit II	Modern Corporation Enterprise. Size and Ownership. Structure of Industrial Enterprise. Dominant Position of Corporate and its Characteristics. Issue of Separation of Ownership from Management and Control Models Alternative to Profit Maximization. Baumol, Williamson, Marris, Cyert, and March.	**15**
Unit III	Monopoly Power and Oligopolistic Market Structure. Measures of Sellers Concentration. Determination of Sellers Concentration: Economies of Scale. Barriers to Entry. Mergers, Size, and Growth of Markets.	**15**
Unit IV	Market Conduct under Oligopoly: Rivalry and Collusive Conduct. Dominant Firm Behavior and Potential Competition. Limit Price and Contestable Markets. Non-Price Competition with reference to Advertising. Market Performance: Allocative Efficiency. Market Structure and Profitability. Productive Efficiency and Sub-optimal Capacity. Allocative versus Productive Efficiency.	**15**
Reference and Reading Books: (1) Barthwal R.R: Industrial Economics. An Introductory Textbook, Wiley Eastern Limited,New Delhi. (2) Cohen K.L. &Cyert R.M: Theory of the Firm. Prentice Hall.		

Dy. Registrar
Pandit Deendayal Upadhyaya
Shekhawati University,
Sikar(Rajasthan)

Semester-IV
Advance Theory of Economics of Development and Growth

Course Objective:
This course provides an in-depth understanding of economic growth and structural change, with a focus on shifts in GDP composition, occupational patterns, and capital accumulation—including human capital. Students will explore classical and neoclassical growth theories, the role of technological progress, and endogenous growth models. The course also examines economic isolation versus global integration, the respective roles of markets and the state, and the impact of market and government failures in a dynamic economic environment.

Course Outcomes:
C01- Students will learn to analyze structural changes in GDP composition, occupational patterns, and capital accumulation, including human capital, and their impact on development.
C02- Students will understand the link between economic development and income distribution through theoretical and empirical frameworks like the Kuznets Curve and studies by Denison and Chenery.
C03- Students will explore the role of technological progress in growth, distinguishing between embodied and disembodied innovations, and study key growth models by Hicks, Harrod, Kaldor, Pasinetti, and Romer.
C04- Students will examine the effects of economic isolation and global integration, and understand concepts of market and government failure, efficiency, and economic systems in a dynamic context.

Course Title:	**Advance Theory of Economics of Development and Growth**	**Course Code: 24MES9401T**
Total Lecture hour: 60		**Hours**
Unit I	Economic Growth and Structural Change: Structural Changes in the composition of gross domestic product, occupational structure, Structure of capital accumulation; and accumulation of human capital; exploring the relationship between economic development and income distribution (Kuznets' inverted U – shaped curve and augmented Kuznets' curve, Denison &Chenery empirical studies).	**15**
Unit II	Living in a heterogeneous world, world-Islands of prosperity and how the other three quarters live, Theories of growth: Classical approach: Adam Smith, Marx and Schumpeter – Neo-classical approach: Robinson, Solow, Kaldor and Harrod-Domar model, Cambridge criticism of Neo- classical analysis of growth, the capital controversy.	**15**
Unit III	Technological progress- embodied and disembodied technical progress, Hicks, Harrod learning by doing, production function approach to the economic growth, growth models of Kaldor and Pasintti, optimal savings and Ramsay's rule of accumulation. Romar model of technological change.	**15**
Unit IV	Endogenous growth; Intellectual capital, AK model, Uzawa-Lucas Model – explanation of cross-country differentials in economic growth, Economic Isolation and Integration with the Global Market. An overview of the Economic Functions of the Market and State, Efficiency of the Competitive Market, Market Failure, Government Failure, on the Choice of Economic System, Market Failure in a DynamicEconomy.	**15**

Reference and Reading Books:

1. Arrow, Kenneth (1962) : The Economic Implications of Learning by Doing, Review of Economic Studies, June, pp. 155-173.
2. Chenery, Hollis and MoisesSyrquin (1975) : Patterns of Development : 1950-70, Oxford University Press.
3. Kuznets, S. (1966) : Modern Economic Growth, Rate Structure and Spread, Vakils, Feffer and Simons Private Limited, Bombay.
4. Meier, Gerald M. and James E. Rauch (2006) : Leading Issues in Economic Development, Eighth Edition, Oxford University Press, New York.
5. Ray, Debraj (2005) : Development Economics, Oxford University Press, Delhi.
6. Robert J.Barrow and Xavier Sala-i-Martin (2004): Economic Growth, Prentice-Hall of India, Pvt.Lid., New Delhi.
7. Romer, Paul M. (1986) : Increasing Returns and Long Run Growth, Journal of Political Economy, October.
8. Romer, Paul M. (1990) : Endogenous Technological Change, Journal of Political

Advance Public Economics

Course Objective:
The course evaluates the budgeting, tax systems, fiscal policy, and public debt to analyze how government interventions maximize resource allocation, understand societal interdependencies, and improve economic efficiency. It aims to familiarize students with designing efficient budgets, implementing substantial tax reforms, optimizing tax systems, formulating effective fiscal policies, and managing public deht to promote sustainable economic growth and societal well-being.

Course Outcomes:
CO1: Students will gain knowledge of fiscal policy concepts such as neutral, compensatory, and functional finance, emphasizing their application in developing countries and the utilization of automatic and discretionary stabilizers for economic stabilization.
CO2: Students will analyze the Indian tax system's key features, major taxes, and revenue trends across central and state governments.
CO3: Students will evaluate the tax reforms, fiscal policies, and financial management practices on the broader economic landscape and societal well-being.
CO4: Students will analyse revenue and expenditure trends in Rajasthan's state finances and examine the specific challenges in revenue generation and expenditure management

Course Title:	**Advance Public Economics**	**Course Code: 24MES9402T**
Total Lecture hour: 60		**Hours**
Unit I	Public Debt Sources, Effects. Burden and its Management, Louns and Saving as Sources of Finance for Development. Fiscal Policy, Neutral and Compensatory Fiscal Policy, Functional Finance, Fiscal Policy in Developing Countries. Fiscal Policy for Stabilization - Automatic and Discretionary Stabilizers. Built in Flexibility, Interdependence of Fiscal and Monetary Policies, Balanced Budget Multiplier. Anti-Inflationary Policy.	**15**
Unit II	Indian Tax System-Salient features, Major Taxex, Main Trends in the Revenue of the Central and State Governments in India, Non Tas Revenue, Union Budget of India, Major Trends in Public Expenditure in India (growth and composition), Problem of Budget Deficit and FRBM Act. Pricing Policy in Public Enterprises, Disinvestment and Privatization of Public Enterprises in India, Internal and External Public Debt of India	**15**
Unit III	Fiscal Federalism Theory and Problems, Problems of Centre State Financial Relations in India, Criteria for Resource Transfer from the Centre to States. Finance Commissions and Devolution of Resources to Stares.	**15**
Unit IV	Recent Tax Reforms in India, recommendation of Raja J.Chelliah Committee and Kelkar Committee. Direct Tax Code and GST.State Finances Trend and Composition of Revenue and Expenditure.	**15**

Reference and Reading Books:

1. R.A. Musgrave and P.B. Public Finance in Theory and practice, New York: McGraw-Hill.
2. K.A. Musgrave: Theory of Public Finance McGraw-Hill,
3. S. Ganguli Public Finance, The World Press Private Limited.
4. John Callis and Phillip Jones, Public Finance and Public Choice, Oxford University Press,
5. Harvey Rosen, Public Finance, McGraw Hill Publications.
6. David N. Hyman, Public Finance-A Contemporary Applications of Theory to Policy, Thomson South Western.
7. R.K. Lekhi, Public Finance, Kalyani Publishers,
8. Chelliah and Kelkar Committee Reports.

Advanced Indian Economy

Course Objectives:
This course aims to equip students with essential economic issues of Indian economy. It also provides an analytical approach regarding issues and problems of Indian Economy & various public policies. Simultaneously, it generates a foundation of answer writing in competitive exams and comparative thinking regarding foreign trade and balance of payment with rest of the world. It also enhances the knowledge of planning, new economic policy, Panchayatiraj MNCS WTO and infrastructure (Physical and Social) of India.

Course Outcome:

COI: It will provide an understanding regarding foreign trade and, balance of payment of India significance of MNCs in India and WTO.

CO2: Course Outcome: Students will understand the economic planning process, decentralized planning, financial aspects of 73 and 74th constitutional amendments provisions, problem of subsidy national income growth trends and patterns and income inequality problem of India.

CO3: Course Outcome: It will provide critical knowledge of first and second-generation economic reforms and physical infrastructure as well as social infrastructure development in India since independence.

Course Title:	**Advanced Indian Economy**	**Course Code: 24MES9403T**
Total Lecture hour: 60		**Hours**
Unit I	Foreign Trade: Salient Features, Trends, Composition, Direction and Trade Reforms, Liberalization and Recent Changes in Trade Policy, MNCs and their Impact on Indian Economy, WIO issues and its Impact on Indian Economy, India's Balance of Payment Position in Recent Years.	**15**
Unit II	Economic Planning: Goals, Achievements and Shortcomings of Planned Development, Planning and the Market Decentralized Planning, Constitutional Obligations and Panchayati Raj Institutions, Balwant. Rai Mehta Committee and Ashok Mehta Committee, Financial Aspects of 73 and 74th Constitutional Amendments.	**15**
Unit III	Problem of Subsidy, National and Per Capita Income, Growth pattem and trends, Aggregate and Sectoral Composition and Change there in, Regional Distribution, Income Inequalities in India.	**15**
Unit IV	New Economic Policy- LPG and Second Phase of Economic Reforms, Infrastructure Development in India- Physical Infrastructure (Power, Transport, Communication and Irrigation) and Social Infrastructure (health and education). SEZs	**15**

Reference and Reading Books:

1. ArvindPangadia India the Emerging Giant
2. RudraDatt and Sundaram: Indian Economy S. Chand (Latest ed.) (Hindi and English)
3. A.N. Agrawal: Indian Economy, New Age International Pub. (P) Limited, (Latest ed.) (Hindi and English)
4. Mishra and Puri: Indian Economy, Himalaya Publishing House, (Latest ed.) (Hindi and English).
5 Twelth Five Year Plan, Planning Commision
6. Economic Survey (Latest) GOL
7. Monthly Bulletins RBI.

Advanced Mathematical Economics

Course Title:	**Advanced Mathematical Economics**	**Course Code: 24MES9404T**
Total Lecture hour: 60		**Hours**
Unit I	The Existence and Uniqueness of Equilibrium - The Stability of Equilibrium, Static Stability- Marshallian and Walrasian Stability Conditions and Dynamic Stability- Lagged Adjustment the Cobweb Model. Consumer's surplus and producer's surplus.	**15**
Unit II	Bilateral Monopoly. Monopolistic Competition Equilibrium: Short Run and Long run: Duopoly and Oligopoly Market Models: The Quasi- Competitive Solution, the Collusion Solution, the Cournot Solution. Stackelberg Solution, The Market Share Solution and the Kinked Demand Curve Solution Models.	**15**
Unit III	Macroeconomic Models- Keynesian Theory of Income Determination and Derivation of Different Multipliers, Employment and Output Determination with Fixed and Flexible Prices: IS-LM and AD-AS Models. Fleming- Mundell Open Economy Model, Trade Cycles: Multiplier-Accelerator Interaction Models of Samuelson and Hicks: Growth	**15**

	Models: Harrod - Domar Model, Neoclassical Models of Solow & Meade and Kaldor's Model.	
Unit IV	Input-output Analysis-concepts of Static, Dynamic, Closed and Open Input- Output Models, Hawkins- Simon Conditions of Viability. Determination of Gross output, Price and Value Added in open input- Output model, Determination of Goss Output in Closed input-output Model: Theory of Games: Two- Person, Constant Sum Games, Zero-Sum Game, Maximin and Minimax. Dominant Strategies, Pure and Mixed Strategies Saddle point Solution.Linear-Programming Formulation of a Matrix Game and Conversion of Game Theory into Linear Programming.	**15**

Note: Use of non- programmable calculator is permitted.

Reference and Reading Books:

1. J.M Henderson and R. L. Quant: Micro Economic Theory: A Mathematical Approach, McGraw -Hill. London.
2. R.G.D. Allen, Mathematical Economics, Macmillan.
3. Alpha C chiang: Fundamental Methods of Mathematical Economics, McGraw-Hill, Kagakusha, Tokyo. 4. R.G.D. Allen, Macroeconomic Theory: A Mathematical Treatment, McGraw- Hill, London.
5. Michael K. Evans: Macroeconomic Activity: Theory, Forecasting and Control.
6. David Romer: Advanced Macroeconomics, McGraw- Hill, Singapore.

Advanced Econometrics

Course Objectives:

The course aims to provide students with an understanding of simultaneous equation models and the identification problem, focusing on the characteristics, estimation techniques, and statistical challenges inherent in analyzing multiple equations simultaneously. This course will make the students proficient in the basics of time-series and panel data analysis, enabling them to conduct empirical research and contribute to policy formulation through data-driven insights.

Course Outcome:

CO1: students will be introduced to features, estimation and statistical problems associated with Simultaneous equation models. Students will be able to comprehend whether model is identified or suffering from under or over identification problem.

CO2: Students will get acquainted with the basic concepts of time series econometrics. It will also assist them to undertake empirical research work based on time series data. They will also learn to forecast and examine short run and long run relationships among the macroeconomie variables.

CO3: This course aims to provide a detailed understanding of panel data regression models, including pooled OLS, fixed effects, and random effects models. It introduces students to the practical aspects of handling EViews software, enhancing their ability to perform advanced econometric analysis.

Course Title:	**Advanced Econometrics**	**Course Code: 24MES9405T**
Total Lecture hour: 60		**Hours**
Unit I	Impact evaluation Methods: Randomized control trials, Control Function Approaches, Matching Methods, Regression Discontinuity.	**15**
Unit II	Time Series Analysis- Unit Roots, Cointegration and ARDL: Deterministic and stochastic trend, trend stationary and difference stationary process; Random walk model; Testing for unit roots, structural change, multiple unit roots, seasonal unit roots; Cointegration, error correction; Testing for cointegration; ARDL Bounds Testing Approach.	**15**
Unit III	Box-Jenkins Methodology: Stationarity, invertibility; Autoregressive models, moving average models, mixed autoregressive and moving average models; Identification, estimation, diagnostic checking; Forecast function, ARCH/GARCH: ARCH Processes; GARCH Processes; ARCH-M and GARCH-M Models, VAR Models: Estimation and identification; Impulse response function; Variance decomposition, Panel Data Methods: Panel Data Unit Root Tests; Panel Data Cointegration Test; Panel Estimation (FMOLS and DOLS).	**15**

Unit IV	Forecasting Methods and Applications: Overview of Forecasting and Forecast Evaluation Applications of forecasting; Forecasting methods and forecast horizons; Nowcasting and backcasting; Measures and tests of accuracy; Choosing between forecasting methods; Unbiasedness and Rationality , Combination of Forecasts; Forecast Encompassing; Optimal combining weights.	**15**

Reference and Reading Books:

1. Greene, William H. (2018): Econometric Analysis
2. Rosenbaum, P. (2017): Observation and Experiment: An Introduction to Causal Inference, Harvard University Press
3. Morgan, S. and Winship, C. (2010): Counterfactuals and Causal Inference: Methods and Principles for Social Science Research. Cambridge University Press
4. S. Athey, G. Imbens (2016): The State of Applied Econometrics: Causality and Policy Evaluation.
5. Box, G.; Jenkins,G.M. and Reinsel, G.C. (2008): Time Series Analysis: Forecasting and Control, 4th Edition, John Wiley
6. Enders, W. (2015): Applied Econometric Time Series, 4th Edition, John Wiley.
7. Greene, W. (2018): Econometric Analysis, 8th Edition, Pearson.
8. Pesaran, M. H. (2015): Time Series and Panel Data Econometrics, Oxford University Press. Pindyck, R. and Rubinfeld, D. (2000): Econometric Models and Economic Forecasts, Fourth Edition, McGraw-Hill.
9. Box, G.E.P., G.M. Jenkins, and G.C. Reinsel (2008), Time Series Analysis: Forecasting and Control, 4th Edition, John Wiley & Sons Inc.
10. Diebold, F.X. (2006): Elements of Forecasting, 4th Edition, South-Western Publishers.
11. Delurgio, S.A. (1998): Forecasting Principles and Applications, McGraw-Hill Publishers.
12. Pindyck, R.S. and Rubinfeld, D.L. (1997): Econometric Models and Economic Forecasts, Fourth Edition, McGraw-Hill.

Advanced Environmental Economics

Course Objectives:

This Course aims to equip students with the tools and understanding necessary to critically analyse environmental issues from an economic perspective and to propose effective policies and solutions to address these challenges. The objective of the course aims to provide students with a comprehensive understanding of the concept of market failure and externalities, both negative and positive, and how they impact economic decision-making and welfare. It provides a clear understanding of various policy instruments used to correct environmental market failures, including taxes, subsidies, cap-and-trade systems, and command-and-control regulations. It enhances student's understanding to examine real-world case studies to apply theoretical concepts and understand the complexities of environmental economics in practice.

Course Outcome:

1. CO1: Students will understand the foundational principles of environmental economics, including concepts like market failure, externalities, and the economics of natural resources.
2. CO2: To develop the ability to apply economic frameworks and tools to analyse environmental issues and policy interventions such as cost-benefit analyses, understanding the impacts of environmental regulations, and evaluating the effectiveness of different policy instruments.
3. CO3: To gain proficiency in assessing environmental policies and proposing solutions based on economic reasoning and evidence which involve designing efficient incentive-based policies or evaluating the implications of different regulatory approaches.
4. CO4: To analyse case studies and real-world examples to illustrate how economic principles are applied to address specific environmental issues and to appreciate the complexities involved in policy implementation.

Course Title:	**Advanced Environmental Economics**	**Course Code: 24MES9406T**
Total Lecture hour: 60		**Hours**
Unit I	Social Choice of Optimum Environmental Protection: Individual preferences regarding Environment Protection- Biocentrism. Sustainability.Anthropocentrism; Social Choice from Individual Values. Welfare Economics: Efficiency and Competitive Markets.	**15**

	Problems- of Market Failure: Public bads and Externalities- Optimal Provision of Public goods and bads. Pricing Public goods and Bads.	
Unit II	Theory of Environment Regulation: Rationale for regulation, Price Rationing, Pigovian taxes- single and multiple Polluters, Subsidies for Abatement of pollution in short and long run, Property Rights: Coase Theorem, Problems of Public bads and Bargaining, Policy significance of Coase Theorem.	**15**
Unit III	Disaster Risk Management and Development: Risk Identification, Risk Reduction and Transfer. Adverse Event Management and Recovery. Common Property Resources and Tragedy of Commons. Command and Control, Economic Incentives; Tradable Pollution Permits.	**15**
Unit IV	Regulation with unknown Control Cost: Unknown Polluter Characteristics (Adverse Selection problem), Unobserved Control Cost- emission fees or quantity regulation, Hybrid price Quantity regulation, Obtaining Private Control Cost Information, Enforcement, Dynamics and Commitment and Moral hazard. Environmental Risk and uncertainty: Regulating Risk with Liability. Liability versus Direct Regulation and Environmental Risk and Insurance.	**15**

Reference and Reading Books:

1. Hanely, N, Jason F. Shorgen, and Ben White (1999). Environmental Economics: In Theory and Practice, Macmillian .
2. Kadekodi, Gopal K. (2004). Environmental Economics in Practices, Oxford University Press.
3. Kolstad, C.D. (2003) Intermediate Environmental Economics, Oxford University Press.

Advanced Industrial Economics

Course Objectives

This course provides a deep insight into the policy goal of industrialization in India with a deep understanding of the structure of organized industry. The course introduces students to the challenges in industrial development in India and government policy to resolve them. It is designed to provide students with ample theoretical knowledge of the industrial sector in India to carry out research in this.

Course Outcome:

CO1: The student will gain an understanding of the evolution of Industrial Policy from Independence to 1991.
CO2: It will enable students to comprehend public sector reforms, the outlook on foreign investment policy, and the impact of industrial policies on the industrial sector.
C03: The student will be able to understand the pattern of industrial growth in India along with an understanding of the episodes of stagnation and deceleration.
CO4: The student will have clarity about MRTP, Competition Policy, and Consumer Protection in India.
CO5: It will make students aware of the Industrial Development in Rajasthan.

Course Title:	**Advanced Industrial Economics**	**Course Code: 24MES9407T**
Total Lecture hour: 60		**Hours**
Unit I	Policy Goal of Industrialization in India. Nature of Industrial Data for Organized Industry. Major Classification of the Organized Industry: Employment Size and Ownership Structure.	**15**
Unit II	Pattern of Industrial Growth and Changes in Industrial Structure in India since 1951.Factors affecting Industrial Location. Regional Imbalances in Industrial Development in India and Government Policy for Balanced Regional Development of Industry.	**15**
Unit III	Market Structure and R&D. Allocative Efficiency and Capacity Utilization in Indian Industry. Productivity Growth, FDI, and Acquisition of Technology in India. Recent liberalisation trends in Industrial sector	**15**
Unit IV	MRTP and Nature of Concentration of Indian Industry. Liberalization and Privatization in Indian Industry. Mergers and Takeovers. Competition Policy and Consumer Protection in India. MSME Sector of India: Role, Policy, Issues, and Performance.	**15**

Reference and Reading Books:

1. Bathwal R.R.: Industrial Economics An Introductory Textbook, Wiley Easton Limited, New Delhi.
2. Cohen K.L. &Cyert R.M.: Theory of the Firm. Prentice Hall
3. Scherer F.M. & Ross David: Industrial Market Structure and Economic Performance.
Boston: Houghton-Mifflin.
4. Hay DA. and Morris DJ: Industrial Economics: Theory and Evidence, Oxfoni University Press
5. Shepherd W.J: The Economics of Industrial Organization, Princeton Hall, Englewood Cliffs, New Jersey.