Department of Economics

CHOICE BASED CREDIT SYSTEM &

LEARNING OUTCOME BASED EDUCATION

M.A. Applied Economics

Syllabus
2024 – 2026

PROGRAMME LEARNING OUTCOMES: (PLOs)

On completion of the programme students will be able to

PLO1: Demonstrate the knowledge of theories, policies, and empirical findings of Economics.

PLO2: Engage in scientific inquiry, critical thinking, using quantitative and qualitative methods.

PLO3: Access and extract data from multiple sources, analyse and interpret the results using quantitative and qualitative tools.

PLO4: Demonstrate competence in written and oral communication and convincingly present arguments with virtual tools.

PLO5: Apply knowledge of economics for team building and create entrepreneurial initiatives for livelihood and social development.

PROGRAMME SPECIFIC OUTCOMES (PSOs):

PSO1: Apply theories, models, and tools of Economics to analyze socio-economic issues and formulate viable solutions.

PSO2: Undertake scientific enquiry and research to resolve socio-economic problems

PSO3: Demonstrate professional competencies to investigate socio-economic issues, extracting qualitative and quantitative data, critically examining its impacts for resource allocation, distribution, and exchange.

PSO4: Engage in reflective thinking leading to self-learning and lifelong learning.

PSO5: Forge sustainable linkages with communities, thereby giving a boost to civic engagement

M.A. Applied Economics

Curriculum and Scheme of Examination

2024-2025 Batch & Onwards

Semester	Course Code	Title of paper	Instruction hours / Week	Contact hours	Tutorial	Duration of Examination	Examination Marks			Credits
							CA	ESE	Total	
I	MAE2401	Micro Economic Theory and Application	5	73	2	3	25	75	100	4
I	MAE2402	Macro Economic Theory and Policy	5	73	2	3	25	75	100	4
I	MAE2403	Statistics for Data Analysis	6	88	2	3	25	75	100	5
I	MAE2404	Economics of Growth and Development	5	73	2	3	25	75	100	4
I	MAE2405	Agricultural Economics	5	73	2	3	25	75	100	4
I	MAE24P1	Practical I – Advanced Excel for Data Analytics	4	58	2	3	25	75	100	2
I-III	17MONL1	Online Course 1	-	-		-	-	-	-	-

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE2401	MICRO ECONOMICS THEORY AND APPLICATION	Theory	73	2	-	4

PREAMBLE

To make the students to understand consumer behavior with the theories of Demand and Production and elaborate various market structure and the theories of distribution.

COURSE LEARNING OUTCOMES

Upon Completion of this course, the Students will be able to

CLO No.	CLO Statement	K-Levels
CLO1	Define, explain, and compare the Theory of distribution.	K2
CLO2	Understand the theories of consumer behavior	K3
CLO3	Identify the choice under uncertainty and Economics of information.	K4
CLO4	Examine the alternative theories of firms.	K5
CLO5	Evaluate how price and output is determined in different market situations and the market structures	K6

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	M
CLO2	S	S	S	M	S
CLO3	S	S	M	S	S
CLO4	S	S	S	S	S
CLO5	S	S	S	S	S

S-Strong; M-Medium

CORE PAPER I - MICRO ECONOMICS THEORY AND POLICIES

Unit I: Consumer Choice: **14 Hours**

Cardinal and ordinal utility - Indifference curve approach – Slutsky's Decomposition of price effect into substitution effect and income effect – Consumer surplus - Marshall's and Hicksian measures – Compensatory Demand Curve- Revealed Preference Theorem- and derivation of Marginal Utility schedule for money income.

Unit II: Economics of Information: **14 Hours**

Informational asymmetry – Choice under Uncertainty - N-M Index – Inter-temporal choice - Market for lemons- Adverse selection – Insurance market and adverse selection – Solution to principal agent problem- Hidden action (Moral Hazard) - Signaling and Screening.

Unit III: Market Structure Models   **16 Hours**

Perfect competition – Price and output determination – Optimum firm-Monopoly – Short run and long run equilibrium - Price discrimination monopoly control, and regulation – Contestable Market-Monopolistic competition–Chamberlin Model- selling costs - Excess capacity – Oligopoly – Duopoly price game-dominant strategy-Nash Equilibrium Non-collusive Models - Oligopoly - Collusive Models - Cartels and mergers -Price leadership - Base point price system Monopsony – Price and output determination – Workable competition.

Unit-IV: Alternative Theories of Firm   **13 Hours**

Full Cost Pricing Rule- Limits pricing Theory- Bains Theory- Sylos-Labini Model- Modigliani's Models- Input-output model -Linear programming applications in decision making- Peak Load Pricing – Administered Pricing- Purchasing Power Parity Price.

Unit -V: Distribution Theories   **16 Hours**

Neo-classical approach – Marginal productivity Theory; Product exhaustion theorem; - Modern Theory of distribution – Factor Pricing in imperfect product and factor markets- Determination of Wages –Labour supply and wage determination – Role of trade unions and collective bargaining-Theories of Interest- Theories of Profit.

Text Books:

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1.	Jhingan M.L,.	Advanced Economic Theory	Vrindha Publications (P) Ltd., New Delhi	2016, 8th ed
2.	Agarwal, H.S.	Micro Economic Theory	Ane's Books Pvt. Ltd., New Delhi	2008, 7th ed

References:

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1.	Hal R. Varian,.	Intermediate Micro Economics	East-West Press: New Delhi	2010, 8th ed
2.	Ahuja H.L.	Advanced Economic Theory	Chand & co New Delhi	2019, 22nd ed

Pedagogy: Lecture by chalk & talk, Power Point Presentation, Assignment, Quiz, Seminar

Course Designers:

1. Dr.K.Renuka, Associate Professor & HOD, Department of Economics
2. Dr.S.Padma Annakamu, Assistant Professor, Department of Economics

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE2402	MACRO ECONOMICS THEORY AND POLICIES	Theory	73	2	-	4

PREAMBLE

To understand the theoretical foundation of macroeconomics and the contribution of different schools of thought to the further development of macroeconomics.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO No.	CLO Statement	Knowledge Level
CLO1	Understand nature of various macroeconomic variables such as output, unemployment, inflation, productivity, and the major challenges associated with the measurement of these aggregates.	K2
CLO2	Explain the difference between financial markets and there all economy, and how these linkages influence the impact of economic policies over different time horizons.	K3
CLO3	Examine macro economic theories of short-term fluctuations and long- term growth in the economy.	K4
CLO4	Evaluate the consequences of basic macroeconomic policy options under differing economic conditions within a business cycle.	K5
CLO5	Analyse balance of payment-wealth effect in the static model- expenditure changing policies- Effective demand-accelerator principle	K6

Mapping with Programme Outcomes

CLOs	PLO1	PLO 2	PLO3	PLO4	PLO 5
CLO1	S	S	M	S	S
CLO2	S	S	S	S	S
CLO3	S	S	S	S	M
CLO4	S	S	S	S	S
CLO5	S	L	S	S	M

S-Strong;M-Medium; L-Low

SEMESTER – I
CORE PAPER -MACRO ECONOMICS THEORY AND POLICIES

Unit-1 Income and Output determination   **13 Hours**

The development of macroeconomics-Government sector and foreign sector-Classical theory of income and employment- The saving investment balance- The labour market equilibrium- Aggregate demand and supply, money and prices in classical model- Keynes' theory of employment- Consumption function, investment demand –Effective demand-Determination of equilibrium income-Theory of multiplier-Derivation of the expenditure multiplier.

Unit-2 Demand side and Supply side Equilibrium   **15 Hours**

Equilibrium income and the interest rate determination in the product market- Equilibrium income and the interest rate determination in the money market- Derivation of IS and LM curves-Shift in IS and LM curves-Simultaneous equilibrium- Fiscal and monetary policy effects on demand - Interaction of monetary and fiscal policies-Aggregate supply in the short run and long run – Supply side disturbances and reactions-Demand side disturbances and reactions- Determination of equilibrium income, employment, rate of interest and price level.

Unit-3 Consumption, Saving and Investment   **16 Hours**

Theories of aggregate consumption- Absolute income hypothesis- Relative income hypothesis-Life cycle hypothesis-Permanent income hypothesis-Robert Hal land Random Walk Hypothesis- Non-income factors affecting consumption-The MPS model-The wealth effect in the static model-The present value criterion for investment-The marginal efficiency of investment- Investment demand and output growth-The accelerator principle and stabilization policy-The rental cost of capital and investment-Tobin's q theory of investment.

Unit-4 Monetary and Fiscal policy   **15 Hours**

The instruments of monetary policy-The mechanism of monetary expansion- money growth targeting and inflation targeting -The effects of fiscal policy changes-Three ranges of LM curve- The effectiveness of monetary and fiscal policy: Monetarists and Fiscalists-Tax rate changes and the budget deficit-Fiscal stimulus and deficit financing- crowding out and crowding in controversy- Quantitative easing policies-macroeconomic policies in advanced and emerging economies.

Unit-5 The External Sector equilibrium   **14 Hours**

The current account and product market equilibrium-The capital account and balance of payments equilibrium-Balance of payment adjustment and the LM curve- The Classical approach: The automatic adjustment method- Balance of payment adjustment by policy measures: Mundell-Fleming model- The expenditure changing policies- The expenditure switching policy: Devaluation- Monetary approach to Balance of payment adjustments.

Text Books

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1.	M.L.Jhingan	Macro Economics	Vrinda Plubication	2017, 42nd ed
2	William.H. Branson	Macroeconomic Theory and Policy,	All India Traveller Book Seller Publishers, NewDelhi	2005, 3rd ed

Reference

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1	D.N.Dwivedi.	Macro economics: Theory and Policy	Tata Mc Graw Hill Education.	2018, 5th ed
2	N.Gregory Mankiw	Macro Economics	Worth Publication	2023, 5th ed

Pedagogy: Lecture by chalk & talk, Power Point Presentation, Case study, Assignment, Quiz, Seminar
Course Designers
1. Dr.G.D.Jasminedeporal, Assistant Professor, Department of Economics
2. Dr.S.PadmaAnnakamu, Assistant Professor, Department of Economics

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE2403	STATISTICS FOR DATA ANALYSIS	Theory	88	2		5

PREAMBLE

To provide a strong foundation in statistical concepts and develop skills in data handling, research, model building and forecasting.

COURSE LEARNING OUTCOMES:

Upon Completion of this course, the students will be able to

CLO No.	CLO Statement	K-Levels
CLO1	Summarize the basic Probability rules and understand theoretical distributions.	K2
CLO2	Acquire knowledge on the various sampling methods and testing of Hypothesis	K2, K3
CLO3	Use t test and chi square for data analysis	K4
CLO4	Understand the application of one- and two-way ANOVA	K5
CLO5	Apply various decision-making tools available	K6

Mapping with Programme Specific Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	M	S	M	M
CLO2	S	M	S	S	S
CLO3	S	S	S	S	S
CLO4	S	S	S	S	S
CLO5	M	S	S	M	S

S-Strong; M-Medium; L-Low

CORE PAPER III- STATISTICS FOR DATA ANALYSIS

Unit I: Probability: **18 Hours**

Probability - Addition and Multiplication Theorems - Conditional Probability - Discrete and Continuous - Random Variables - Mathematical Expectations – Bayes Theorem - Theoretical Distributions - Binomial, Poisson and Normal.

Unit II: Sampling and Hypothesis Testing: **18 Hours**

Sampling Theory - Types of Sampling - Sampling Distributions - Parameter and Statistic - Testing of Hypothesis - Level of Significance - Type I and Type II Errors - Standard Error - Properties of Estimator.

Unit III: Test of Significance Large and Small Sample: **18 Hours**

Difference between Large and Small Samples - Test of Significance for Large Samples - Test for Two Means and Standard Deviations - Proportion and Confidence Interval - Small Sample Test – t-test - Paired t- test - Chi-square Test- Test of Goodness of Fit.

Unit IV: Analysis of Variance: **16 Hours**

F test: Assumptions in F test - Analysis of Variance: Assumptions – One-Way and Two-Way Classifications.

Unit V: Statistical Decision Theory: **18 Hours**

Definitions – Concepts – Maximin - Minimax - Bayes Criterion - Expected Monetary Value - Decision Tree Analysis: Symbols - Steps - Advantages and Limitations.

Text Books

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1.	Gupta S.P	Statistical Methods,	Sultan Chand and Sons, New Delhi,	2019, 46th ed
2.	Anderson, Sweeney and Williams	Statistics for Business and Economics	Cengage	2015, 12th ed

References

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1	Agarwal. Y.P	"Statistics Methods – Concepts Application and Computation",	Sterling Publishers Private Ltd., New Delhi	2012
2.	Pillai R.S.N. and Bagavathi V	Statistics	Sultan & amp; Chand Sons, New Delhi	2019, 8th ed
3.	Beth Thome	Statistics for Business and Economics	Pearson Education Ltd	2022, 10th ed

Pedagogy : Chalk and Talk, PPT, Pair and Share, Peer

Learning Course Designers

1. Dr. C. Athena. Assistant Professor, Department of Economics
2. Dr. K. Renuka, Associate Professor, Department of Economics

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE2404	ECONOMICS OF GROWTH AND DEVELOPMENT	Theory	73	2	-	4

PREAMBLE

To enable the students to examine the challenges faced by developing countries; explore the factors that influence their economic growth and the role of policies in promoting sustainable development.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO No.	CLO Statement	K-Levels
CLO 1	Understand the concepts of poverty and inequality and role of governance and institutions in the context of sustainable development, environmental issues, and globalization	K2
CLO 2	Apply the Growth Models and Theories to analyze economic growth, while also understanding the role of human capital, structural transformation, innovation, and technology in the context of economic growth.	K3
CLO 3	Analyse the merits and demerits of trade development strategies, understanding the dynamics of industrialization and structural transformation	K4
CLO 4	Analyze the distinctions between economic growth and development, and understand the historical perspectives,	K4
CLO 5	Evaluate the theoretical frameworks, and measurement techniques in the field of growth and development economics.	K5

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO 1	S	S	S	S	S
CLO 2	S	M	S	S	S
CLO 3	S	S	S	M	S
CLO 4	S	S	S	S	S
CLO 5	S	M	S	S	S

S-Strong; M-Medium; L-Low

CORE PAPER IV - ECONOMICS OF GROWTH AND DEVELOPMENT

Unit 1: Introduction to Growth and Development Economics: **12 Hours**

Definitions and distinctions between economic growth and development-Historical perspectives on development-Theoretical frameworks in growth and development economics-Measuring economic development: income and non-income indicators-Key challenges.

Unit 2: Theories of Economic Growth: **17 Hours**

Harrod-Domar Model-Solow Growth Model-Endogenous Growth Theories-Human Capital and Economic Growth-Structural Transformation and Growth-Innovation, Technology, and Growth-Critical minimum efforts thesis- Low level equilibrium trap-Dualism and Dependency theory- Neo-classical Theories of Growth Preferences, Technology, and Demographics-- Lewis Model, Ranis and Fei Model, Big push theory.

Unit 3: Economic Development Strategies: **14 Hours**

Industrialization and Structural Transformation-Rural and Agricultural Development- Human Capital Development-Technological progress and innovation policies- Trade and development strategies- Role of Foreign Aid and Foreign Direct Investment- Environmental sustainability in development- Economic reforms and liberalization- Case studies on development policies and their outcomes

Unit 4: Inequality, Poverty, and Development: **15 Hours**

Concepts of poverty and inequality-Measurement of poverty and inequality-The poverty-environment nexus-Policies for poverty reduction-Inclusive development and social safety nets-Urbanization and Income Inequality-Education Disparities and Human Capital Development- Gender Inequality and Economic Development-Rural Poverty and Agriculture-Healthcare Disparities and Access to Services-Wealth Inequality and Asset Accumulation-Inequality in Access to Technology and Digital Divide.

Unit 5: Development Policy and Challenges: **15 Hours**

Governance and institutions-Political Economy of Growth Institutions, Political Economy and Growth: Impact of Institutions on Long-run development, Distributional conflict and economic growth in a simple society, Canonical Cobb-Douglas model of distributional conflict, Sustainable development and environmental issues-Globalization and trade-Macroeconomic stability and fiscal policy-Case studies on selected developing countries

Text Books

S.No	Author Name	Title of the Book	Publisher	Year & Edition
1.	Michael P. Todaro and Stephen C. Smith	Economic Development	Pearson	2017, 12th ed
2.	M.L.Jhingan	The Economics of Development and Planning	Vrinda	2019, 42nd ed

References

S.No	Author Name	Title of the Book	Publisher	Year & Edition
1	Agarwal.R.C	Economics of Development and Planning	Agarwal	2020
2.	Amartya Sen	Development as Freedom	Anchor Books	1999 Reprint

Pedagogy: Chalk & Talk, PPT, Peer Learning, Quizzalise

Course Designers

1. Dr Kavitha N.V, Asst Professor, Department of Economics
2. Dr S.Padma Annakamu, Asst Professor, Department of Economics

Session Plan

Economics of Growth and Development

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE2405	AGRICULTURAL ECONOMICS	Theory	73	2		4

PREAMBLE

The course is structured based on three stages of Agricultural Productions, namely Pre-production, Production and Post Production so that the students get an overall understanding of the agricultural issues and policy thereof.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO No.	CLO Statement	Knowledge Level
CLO1	Sensitize the overall development and engine of growth in agriculture	K2
CLO2	Explain Gain deep knowledge of the causes of regional variations in productivity and production, social and economic inequality, size of land holdings and lack of quality inputs etc.	K3
CLO3	Analyse the production and rural structure of the economy	K4
CLO4	Examine the post production and Pricing and marketing strategies	K5
CLO5	Describe the agriculture sector and emerging issues in an interdependent world	K6

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	S	S
CLO2	S	S	S	S	S
CLO3	S	S	S	S	M
CLO4	S	S	S	S	S
CLO5	S	S	S	S	S

S - Strong; M-Medium; L-Low

CORE PAPER V - AGRICULTURAL ECONOMICS

UNIT I Introduction   **14 Hours**

    Agricultural Economics: meaning, nature and scope; History and Development; Contribution; Basic Theories; Hunger and Malnutrition; Food and Nutritional Security.

UNIT II Production and Rural Structures   **16 Hours**

    Issues related to Land; Water; Energy; Seed; Fertilizers; Nexus issues; Credit; Indebtedness; Subsidies; Insurance and Capital formation. Crop Production and Productivity; Labour Relations Employment and Wage; Non-farm Sector; Role of Technologies; Livestock Management; Structural Transformation and Mobility

UNIT III Post-Production, Marketing anPd Pricing Strategies   **14 Hours**

    Cost of Cultivation and CACP; Pricing; Income; Issues in Marketing and its Channels; Value Addition and Processing; Research: Education and Extension.

UNIT IV Agriculture in an Interdependent World   **13 Hours**

    WTO, Negotiations and Agreements; Trade and International Relations; Problems of Agricultural Subsidies; Patents; Agricultural Exports: Quantitative Restrictions (QRs) and Non- Tariff Barriers

UNIT V   Emerging Issues in Agriculture   **16 Hours**

    Sustainable Agriculture; Climate Change and issues; Organic, Zero Budget, Climate Smart and Precision Farming; Law and Policies, Best Practices in Agriculture from around the World.

Text Books

Sl.No.	Author Name	Title of the Book	Publisher	Year & Edition
1.	Ray,D.,	Development Economics	Oxford Publisher	2012
2	von Braun, J, M.S. Swaminathan, and M W. Rosegrant,	Agriculture, Food Security, Nutrition, and the Millennium Development Goals	Essay, IFPRI, Washington. DC	2004, Reprint

Reference Books

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1	Sadhu.A.M. & Singh	Fundamentals of Agricultural Economics	Himalyan Publishing House	2014, 11th ed
2	Vaidyanathan,A	Performance of Indian Agriculture since Independence" in Kaushik Basu (ed.), Agrarian Questions	Oxford University Press.	1994

Pedagogy

Lecture by chalk & talk, Power Point Presentation, Assignment, Quiz, Seminar

Course Designers:

1. Dr.S.Padma Annakamu, Assistant Professor, Department of Economics

2. Dr.G.D.Jasminedeporal, Assistant Professor, Department of Economics

COURSE NUMBER	COURSENAME	Category	L	T	P	Credit
MAE24P1	**ADVANCED EXCEL FOR DATA ANALYSIS**	**Practical**	**58**	**2**	**-**	**2**

PREAMBLE
The Course aim locate economics data and provide meaningful economic analysis of this data using Excel to produce charts, scatter plots, descriptive statistics and simple linear regression.

COURSE LEARNING OUTCOMES
On the successful completion of the course, students will be able to:

CLO No.	CLO Statement	Knowledge Level
CLO1	Understand Excel effectively and efficiently use Microsoft Excel to convert raw data into useful information for Business and Economic decision-making. Cell References, Number Formats Facade, Effective and efficient spread sheet design including Excel's Golden Rule.	K2
CLO2	Demonstrate the ability to use data analysis packages of advanced excel pertaining to Statistics and econometric analysis to give robust and significant answers to economic and societal problems.	K3
CLO3	Analyse the Cross Tabulation-Hypothesis Testing- One sample z test-Coefficient of variation, Standard Deviation and coefficient of variation- Skewness, and Kurtosis	K4
CLO4	Examine paired t-test- Mann-Whitney U test- Kruskal Wallis test, Chi-Square- F test Data Analysis features, such as PivotTables, Sorting, Filtering and Importing Data, Vlookup. Price indices-Quantity Indices	K5
CLO5	Describe spearman's Rank correlation- Partial Correlation-Simple and Multiple Regression, ANOVA, MANOVA, MANCOVA, Factor Analysis	K6

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	S	S
CLO2	S	S	S	S	S
CLO3	S	S	S	S	M
CLO4	S	S	S	S	S
CLO5	S	M	S	M	S

S-Strong;M-Medium;L-Low

PRACTICAL – I ADVANCED EXCEL FOR DATA ANALYSIS

Unit-1 Introduction to Excel   **8 hours**

Excel basic: Introduction about Microsoft Excel at the basic level: overview, tools, creates a spreadsheet, format, spreadsheet, calculations, create charts and printing, Formulas & Functions, Cell References, Number Format as Facade, Effective and efficient spreadsheet design including Excel's Golden Rule, Data Analysis features, such as Pivot Tables, Sorting, Filtering and Importing Data, V lookup

Unit-2 Univariate Analysis   **10 hours**

Tabulation and diagrammatic representation of data-Line, Bar, Pie Diagram – Frequency Distribution and its diagrammatic presentation- Construction of frequency distribution – Histogram, O give and Frequency Polygon - Measures of Central Tendency-Mean, Median, Mode –Measures of dispersion- Range, Mean Deviation, Coefficient of variation, Standard Deviation and coefficient of variation - Skewness and Kurtosis

Unit-3 Bivariate and Multivariate Analysis   **15 hours**

Scatter Plots, Cross Tabulation-Hypothesis Testing- One sample z test- One sample t test-Paired t-test-Mann-Whitney U test-Kruskal Wallis test, Chi-Square-F test

Unit-4 Analysis of Correlation   **16 hours**

Correlation Coefficient - Spearman's Rank correlation – Partial Correlation-Simple and Multiple Regression, Use of confidence intervals and hypothesis tests for regression coefficients, Dummy, and indicator variables, ANOVA, MANOVA, MANCOVA, Factor Analysis

Unit-5 Indices   **9 hours**

Price indices – Quantity Indices – Deflating time series by price indices –Shifting bases and chaining indices

TextBooks

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1.	Anderson,Sweeney, Williams	Essentials of Modern Business Statistics with Microsoft Office Excel	Cengage Learning	2017, 7th ed
2	Rinkoo Jainn	MS Excel: A Book for learners and Trainers	Prentice-Hall,	2021

Reference Books

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1	Sima Alex	Excel Formulas and Functions: Cool Tips and Tricks With Formulas in Excel	Caprioru	2018
2	LeonardoL.Wright	Excel2023:AComprehensive Guide to become an Expert on Excel 2023 With All-in-One Approach	Eclectic Editions Limited	2023

Pedagogy: Lecture by chalk & talk, Power Point Presentation, Case study, Assignment, Quiz, Seminar

CourseDesigners

1. Dr.S.PadmaAnnakamu, Assistant Professor, Department of Economics
2. Dr.G.D.Jasminedeporal, Assistant Professor, Department of Economics

Department of Economics

M.A. Applied Economics

Syllabus (2024 Batch)

PROGRAMME LEARNING OUTCOMES: (PLOs)

On completion of the programme students will be able to

PLO1: Demonstrate the knowledge of theories, policies, and empirical findings of Economics. PLO2: Engage in scientific inquiry, critical thinking, using quantitative and qualitative methods. PLO3: Access and extract data from multiple sources, analyse and interpret the results using quantitative and qualitative tools.

PLO4: Demonstrate competence in written and oral communication and convincingly presentarguments with virtual tools.

PLO5: Apply knowledge of economics for team building and create entrepreneurial initiatives for livelihood and social development.

PROGRAMME SPECIFIC OUTCOMES (PSOs):

PSO1: Apply theories, models, and tools of Economics to analyze socio-economic issues and formulate viable solutions.

PSO2: Undertake scientific enquiry and research to resolve socio-economic problems

PSO3: Demonstrate professional competencies to investigate socio-economic issues, extracting qualitative and quantitative data, critically examining its impacts for resource allocation, distribution, and exchange.

PSO4: Engage in reflective thinking leading to self-learning and lifelong learning.

PSO5: Forge sustainable linkages with communities, thereby giving a boost to civic engagement.

M .A Applied Economics
Curriculum and Scheme of Examination
2024-2025 Batch & Onwards

Semester	Part	Course Code	Title of the Course	Instruction hours /week	Contact hours	Tutorial	Duration of Examination	Examination Marks			Credits
								CA	ESE	Total	
II	III	MAE2406	Fiscal Economics	5	73	2	3	25	75	100	4
II	III	MAE2407	International Trade & Finance	5	73	2	3	25	75	100	4
II	III	MAE2408	Advanced Mathematical Economics	5	73	2	3	25	75	100	5
II	III	MAE2409	**IDC** Gender Economics	5	73	2	3	25	75	100	4
II/III	III	MAE2410/ MAE24CE	Economics of law/ Fintech Foundation and Computational Thinking	3	45	2	3	25	100	100	4
		MAE2411	Energy Economics	3	-	-	-	-	-	-	-
II	III	MAE24P2	Business Analytics with R - Practical	4	58	2	3	25	75	100	2
II	III	17MONL2	Online Course	-	-	-	-	-	-	-	-

CA- Continuous Assessment ; ESE- End semester Examination ; IDC- Inter Displinary Course

Particulars/ Semester	I	II	III	IV	Total no of Papers	Total Credits	Total Marks
Theory	5	4	3	2	14	61	1200
Practicals	1	1	1		3	6	500
Project				1		6	100
Advance Learner Course				1		5*	100*
Electives		1	1		2	9	200
Interdisciplinary		1			1	4	100
Special Course			1		1	4	100
Institutional Training			1				
Comprehensive exam (Online)			1				
Online Course	1	1					
Job Oriented Course			1				
Total Subjects	7	7	7	4			
Total Marks					21	90	2200

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE2406	FISCAL ECONOMICS	Theory	73	2	-	4

PREAMBLE:

To enable the students to understand fiscal economics, taxation policies, and their implications for India, comprehend the theoretical foundations, practical application, and international perspectives and analyze and contribute to fiscal policy discussions and decisions in the Indian context.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO No	CLO Statement	K-Levels
CLO 1	Demonstrate a comprehensive understanding of fiscal economics and will be able to apply classical and moderntheories of taxation	K2
CLO 3	Assess and apply public expenditure theories and understand the determinants of government spending	K3
CLO 2	Analyze and apply taxation principles and will be capable of comparing and contrasting various types of taxes	K4
CLO 4	Analyze the budgeting and allocationprocessfor government expenditures.	K4
CLO 5	Evaluate the interrelationships between fiscal and monetary policies	K5

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO 1	S	S	S	S	S
CLO 2	S	M	S	S	S
CLO 3	S	S	S	M	M
CLO 4	S	S	S	S	S
CLO 5	S	S	S	S	S

S-Strong; M-Medium; L-Low

Unit I- Foundations of Fiscal Economics:14 Hours
Introduction to Fiscal Economics- Definition and scope of fiscal economics-Objectives and significance in economic policy-Theories of Taxation-Classical and modern theories of taxation-Tax incidence and tax shifting – meaning- factors affecting incidence -Directand indirect taxes-Recent tax reforms and developments, Government Budgeting-Budgetary process in India-Types of budgets: Union, State, and Local.

Unit II- Taxation and Public Finance:15 Hours Principles of Taxation-Tax equity, efficiency, and simplicity-Tax bases, tax rates, and taxexemptions -Taxation and Economic Growth-Public Debt Management- Concepts of public debt-Debt sustainability and management in India,-Fiscal Federalism-Center-State financial relations in India-Goods and Services Tax (GST)and its implications

Unit III-Government Expenditure:15   Hours
Public Expenditure Theories-Wagner's law and Peacock-Wiseman hypothesis-Determinants of government spending, Public Goods and Services-Types of public goods-Rationale for government provision, Budgeting and Allocation-Process of government expenditure budgeting-Evaluating public expenditure programs- Subsidies and Welfare Programs-Analysis of subsidies in India-Poverty alleviation and social welfare schemes

Unit IV- Fiscal and Monetary Policy:14 Hours
Interaction of Fiscal and Monetary Policy-Complementary and conflicting aspects-Fiscal-monetary policy coordination, Deficits and Inflation-Fiscal deficits and inflation-The role ofcentral bank in controlling inflation, Fiscal Responsibility and Budget Management Act (FRBM)-Provisions and objectives-Implementation and challenges

Unit V- International Aspects of Fiscal Economics:15 Hours
International Trade and Taxation-Tax implications on international trade-Transfer pricing and Base Erosion and Profit Shifting (BEPS), Double Taxation Avoidance Agreements (DTAAs),Overview and significance-India's DTAAs and their impact- Global Economic Organizations- Role of IMF, World Bank, and WTO-Fiscal policies and international coordination.

Text Books:

Sl.No.	Author Name	Title of the Book	Publisher	Year & Edition
1	Rosen, H. S., &Gayer, T	Public Finance	McGraw-Hill Education	2017
2	Musgrave, R. A., & Musgrave, P. B.	Public Finance in Theory and Practice	McGraw-Hill Education	2017

References:

Sl.No	Author Name	Title of theBook	Publisher	Year & Edition
1	Stiglitz, J. E., & Rosengard, J. K.	Economics of thePublicSector.	W. W. Norton &Company	2015
2	Bird, R. M., & Vaillancourt, F.	Fiscal Decentralization in DevelopingCountries.	Cambridge University Press	2008

Pedagogy: Chalk & Talk, PPT, Peer Learning, Quizzalise
Course Designers:
  1.Dr Kavitha N.V, Asst.Professor, Department of Economics
  2.Dr S.Padma Annakamu, Asst.Professor, Department of Economics

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE2407	INTERNATIONAL TRADE AND FINANCE	Theory	73	2	-	4

PREAMBLE

To enable the students to acquire a comprehensive understanding of the theory and practice of international trade and   finance.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO No	CLO Statement	K-Levels
CLO 1	Demonstrate a comprehensive understanding of international trade, including classical and modern trade theories	K2
CLO 2	Comprehend the historical evolution of the international monetary system, including the Bretton Woods era and the post-Bretton Woods period.	K2
CLO 3	Analyze the pivotal role of trade and finance in shaping economic policy-making,	K3,K4
CLO 4	Analyze the components of the Balance of Payments (BoP), comprehend foreign exchange markets and assess the implications of exchange rate movements on international trade and capital flows.	K4
CLO 5	Evaluate contemporary trade issues such as trade wars and regional trade agreements and their impact on the global economy	K5

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO 1	S	S	S	S	S
CLO 2	M	S	S	S	S
CLO 3	S	S	S	S	S
CLO 4	S	M	S	S	S
CLO 5	S	S	S	S	S

S-Strong; M-Medium; L-Low

Unit I: Foundations of International Trade   **14 Hours**
Introduction to international trade and its importance in the global economy-Classical and modern trade theories (Comparative Advantage, Heckscher-Ohlin, New Trade Theory)-Global trade organizations (WTO, UNCTAD) and their functions-Trade policies, trade liberalization, and the impact on economic growth-Trade barriers and tariff analysis

Unit II: Exchange Rates and Balance of Payments   **14 Hours**
Balance of Payments (BoP) framework and its components-Foreign exchange markets and exchange rate determination-Exchange rate systems and exchange rate regimes-Exchange rate risk management and currency hedging strategies-Implications of exchange rate movements on trade and capital flows

Unit III: Trade Finance and International Investment   **15 Hours**
Trade finance instruments -Export and import financing methods and services-International investment and capital flows-Foreign Direct Investment (FDI) and its determinants-Portfolio investment, diversification, and risk assessment

Unit IV: Global Financial Markets and Multinational Corporations   **15 Hours**
International monetary system evolution (Bretton Woods, Post-Bretton Woods)-Role of international financial institutions (IMF, World Bank)-Multinational corporations and their impact on global finance-Capital flows and international portfolio investment-Financial crises and contagion, with a focus on emerging markets

Unit V: Policy Implications and Contemporary Issues   **15 Hours**
The role of trade and finance in economic policy-making-Contemporary trade issues (e.g., trade wars, regional trade agreements)-Global financial regulations, Basel Accords, and international financial stability-Sovereign debt and debt crisis management-Emerging market opportunities and challenges

Textbooks:

Sl.No	Author Name	Title of theBook	Publisher	Year &Edition
1	Paul Krugman and Maurice Obstfeld	International Trade	Pearson.	2018
2	Maurice D. Levi	International Finance	Routledge	2016

References:

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1	Paul Krugmanand Maurice Obstfeld	International Economics- Theory and Policy	Pearson.	2017
2	Charles W. L.Hill	Global Business Today	McGraw-Hill Education	2018

Pedagogy: Chalk & Talk, PPT, Peer Learning, Quizzalise

Course Designers:

1.Dr Kavitha N.V, Asst Professor, Department of Economics

2.Dr S.Padma Annakamu, Asst Professor, Department of Economics

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE2408	ADVANCED MATHEMATICALECONOMICS	Theory	73	2	-	4

PREAMBLE
To enable the students to have a comprehensive introduction to basic mathematical economic concepts, tools and applications, functions, models and optimization techniques in various micro economic contexts.

COURSE LEARNING OUTCOMES
On the successful completion of the course, students will be able to:

CLO No	CLO Statement	K- Level
CLO1	Describe the mathematical structure of standard economic theoretical framework	K2
CLO2	Understand and Apply mathematical tools to solve optimization problems in economic theory	K2, K3
CLO3	Examine and solve mathematical models in the theory of Consumer behaviour .Firm amd market structure	K3, K4
CLO4	Evaluate the mathematical models to analyze strategic interactions among economic agents by exploring the dynamics of Consumer Behaviour, Firm's Behaviour market equilibrium in an economy	K5
CLO5	Estimate mathematically the dynamics of the growth process in an Economy and Synthesize mathematical tools and economic theory to develop advanced models for **decision-making** and policy analysis in real-world economic contexts.	K5, K6

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	S	S
CLO2	S	S	S	S	S
CLO3	S	S	S	S	M
CLO4	S	S	S	S	S
CLO5	S	S	S	S	S

S - Strong; M-Medium; L-Low

CORE PAPER VIII - ADVANCED MATHEMATICAL ECONOMICS

UNIT I- Differential Calculus:15Hours
Differentiation: Meaning – Basic Rules - Successive Differentiation of the functions up to Second Order – Partial Differentiation - Total Differentiation. Optimization: Maxima & Minima of a function with two v ariables – Hessian Determinant – Lanrangian Method

UNIT II-Theory of Consumer:15 Hours
Indifference curve analysis: Indifference curves - properties, Rate of commodity substitution (MRS) – Maximisation of utility – Slutsky Equation – Income and Substitution Effect – Important results from Slutsky Equation – Elasticity form of Slutsky equation.
.
UNIT III- Theory of Firm:15 Hours
Production function - Equal Product Curves (Isoquants) - Shape of Isoquants - Isoquants and Ridge Lines – Least Cost Combination (Constrained Cost Minimisation) – Constrained profit Maximisation – Homogeneous Function – Properties of Linearly Homogeneous Function - Cobb Douglas Production Function - Properties.

UNIT IV-Market Equilibrium:13 Hours
Revenue function: Average, Marginal Revenue - Total Revenue – Cost function: Average, Marginal Cost – Total Cost – Multiple Production by Monopolist – Discriminating Monopoly.
UNIT V-Game Theory: 18 Hours
Concepts of Games in economics: Player, Payoff, Outcome and Types – Different forms of representing Games – Equilibriums in Games and Simple Problems (Pure and Mixed Strategies) – Idea of Nash Equilibrium.

Text Books:

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1	MethaB.C.&Madnani G.M.K	Mathematics for Economists	S.Chand Publications,NewDelhi,	2020
2	Henderson and Quant	Micro Economic Theory	McGraw-Hill International Edition	2017

References:

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1	Allen,R.G.D.	Mathematical Analysis forEconomists	Andesite Press, Berlin Germany,	2015
2	Despande.V.D	Elementary Mathematical Techniques for Economics	S.Chand, NewDelhi	2017

Pedagogy : Chalk and Talk, PPT, Pair and Share, Peer Learning

Course Designers:
    1.Dr. C. Athena. Assistant Professor, Department of Economics
    2.Dr. K. Renuka, Associate Professor, Department of Economics

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE2409	GENDER ECONOMICS	Theory	73	2	-	4

PREAMBLE:
 1.To evaluate sources of socio-economic and demographic information for analyzing the impact of the gender factor on demographic processes and economic development
2.It enables to foresee the contributions of women as active economic agents and strategies to empower women and reduce gender inequalities.

COURSE LEARNING OUTCOMES :
Upon Completion of this course, the students will be able to

CLO No	Course Outcomes	K-Levels
CLO1	Understand the Gendered jobs and Social Inequality	K2
CLO2	Describes the Issues of wage discrimination and exploitation in unogranised sector	K3
CLO3	Explain the Gender issues in Health,Environment, Family welfare Measures	K4
CLO4	Evaluate the Impact of Globalization on working women and National Policy for the empowerment of women 2001	K5
CLO5	Assess the Initiatives towards recognition of women as agents of development from sixth five year plan.	K6

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO 1	S	S	S	S	S
CLO 2	S	M	S	S	S
CLO 3	S	S	S	M	M
CLO 4	S	S	S	S	S
CLO 5	S	S	S	S	S

S-Strong; M-Medium; L-Low

GENDER ECONOMICS

Unit I: 13 Hours
Defining Gender and Economics- Key concepts: Intersectionality, social structures, patriarchy- The role of women in economic growth- Theories of gender inequality in economic contexts: Classical and neoclassical economic theories and gender, Alternative economic theories – feminist and postcolonial. Overview of feminist economics-Global perspectives on gender and development

Unit II: 15 Hours
 Gender segregation in labor markets- Women's participation in organised and unorganized sector- Gender issues at the work place-The role of unions and collective bargaining in promoting gender equality. Unpaid Care Work and Household Economics: The economic value of unpaid labor (care work, domestic labor)- Policies addressing unpaid labor (e.g., paid family leave, childcare). The gender pay gap: causes and consequences -Economic policies that address gender income inequality.

Unit III: 15 Hours
The Family and Economic Systems: Family structures and their economic implications-Gender, marriage, and property rights. Women's economic empowerment within families-Gender-based violence and its economic costs - Role of Women in Economic Development –- Status of Women farmers and land rights - Women Entrepreneurs, Gender and Climate Change: The gendered impacts of climate change-women's role in environmental sustainability and green economies-Climate justice from a gender perspective

Unit-IV :   15 Hours
Gender and Digital Economy: The gender digital divide- Women in tech and digital entrepreneurship-The future of work and gendered implications of automation and AI, Gender and Financial Inclusion: Women and access to finance-Financial literacy, banking, and credit access-Gender-responsive financial systems and policies-Women's participation in global economies-The role of international organizations (e.g., World Bank, UN Women)-Microfinance and its impact on gender equality

Unit V: 15 Hours
Initiatives towards recognition of women as agents of development from sixth five year plan. National Policy for the empowerment of women 2001, Female Poverty and Poverty alleviation programme, Gender mainstreaming in economic policy-Social protection and gender-Gender quotas in politics and business-Evaluating gender sensitive economic policies (e.g., affirmative action, equal pay legislation), participatory approaches, gender budgeting, micro-credit. Welfare and Social Security Measures. Impact of Feminist Economics on Policy

Text Books:

Sl.No	Author Name	Title of the Book Publication	Publisher	Year & Edition
1	Eswaran, M.	Why gender matters in economics	Princeton University Press	2014
2	Becchio, G	A History of Feminist and Gender Economics	Routledge	2019

Reference Books

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1	Humphries, J	Gender and economics	Edward Elgar Publishing	1995
2	Negra, D., &Tasker, Y.	Introduction. Gender and recessionary culture. In Gendering the Recession	Duke University Press	2014

Pedagogy: Lecture by chalk & talk, Power Point Presentation, Assignment, Quiz, Seminar

Course Designers:
   1.Dr. Jayamala , Assistant Professor, Department of Women Studies
   2.Ms. Lekshmi.S , Assistant Professor, Department of Economics

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE2410	ECONOMICS OF LAW	Theory	43	2	-	4

PREAMBLE

The course aims to deepen students understanding of how economic Theory can be applied topolicy problems of the economy

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO No	CLO Statement	K- levels
CLO1	Understand the relationship between law and Economics, gain knowledge about the Indian Legal System.	K2
CLO2	Explain the Competition Act and learn the overview of the New Labour Code.	K3
CLO3	Learn about the law of contracts and Right to Information Act	K4
CLO4	Demonstrate the objectives of Consumer Protection Act, Food Safety and Standards Act and familiarize with dispute resolution processes adopted in India.	K5
CLO5	Implement knowledge about IPR and IT Act	K6

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	S	S
CLO2	S	S	S	S	S
CLO3	S	S	S	S	M
CLO4	S	S	S	S	S
CLO5	S	S	S	S	S

S-Strong;M-Medium;L-Low

UNIT I-Introduction:8 Hours
Classification of Legal System – Judicial system in India – Relationship between Economics and Law – Importance of law and Economics - Economic approach to legal rules – Law as a tool to encourage Economic Efficiency – Arrow's Impossibility Theorem.

UNIT II-Property law: 9 Hours
meaning – bargaining theory – coase theorem and transaction costs- intellectual property rights - patents – copyright – trademark –internalizing externalities

UNIT III-Tort Law: 8 Hours
Economic Theory of Tort Liability – Minimizing social costs of accident – Learned Hand rule – Pricing Life or Pricing Risk - Consumer Protection Law – Breach of warranty – Insurance

UNIT IV-Contract Law: 9 Hours
Meaning – Economic theory of contract – spillovers – Asymmetric information - Remedies – Efficient Breach theory of contract and Performance – Discharge of contracts: Agreement - operation of law

UNIT V-Corporate law: 11 Hours
Corporate restructuring: Mergers, amalgamation and Acquisition - Securities and Exchange Board of India Act - MRTP Act - Competition Act - Predatory pricing – Foreign Exchange Management Act- Information Technology Act 2000- CorporateSocial Responsibility

Text Books:

Sl.No.	Author Name	Title of the Book	Publisher	Year & Edition
1	Robert D Cooter and Thomas Ulen	Law and Economics	Addison Wesley-Pearson	2012
2	S R Myneni	Law and Economics	New Era Law Publication	2020, 1st ed

Reference Books:

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1	Robin Malloy	Law and Economics: An introductory toolkit	Carolina Academic press	2019
2	An introductionto law and Economics	A. Mitchell Polinsky	Aspen Publication	2018

Pedagogy: Lecture by chalk & talk, Power Point Presentation, Assignment, Quiz, Seminar

Course Designers:

1.Dr.S.Padma Annakamu, Assistant Professor, Department of Economics

2.Dr.Jasminedeporal, Assistant Professor, Department of Economics

COURSE NUMBER	COURSE NAME	CATEGORY	L	T	P	Credit
MAE2411	ENERGY ECONOMICS	Theory	73	2	-	4

PREAMBLE

To enable the students to understand the concepts and scope of energy economics within global and Indian context, analyse the interplay between energy demand and supply and its influencing factors and explore the complexities.

COURSE OUTCOMES

On the successful completion of the course, students will be able to:

CLO No	CLO Statement	K - Levels
CLO 1	Understand the fundamental concepts of energy economics	K2
CLO 2	Experiment the role of energy policy in sustainable energy development and its implications for both India and the global energy landscape	K3
CLO 3	Analyze and evaluate the factors influencing energy demand, such as price, income, technology, and policy	K4
CLO 4	Analyze the various pricing mechanisms and market structures in the energy sector, along with their impact on the economy.	K4
CLO 5	Evaluate and assess the different classifications of energy resources and their environmental implications and cost structures associated with these resources.	K5

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO 1	S	S	S	M	S
CLO 2	S	S	S	S	S
CLO 3	S	M	S	S	S
CLO 4	S	S	S	S	M
CLO 5	S	S	S	S	S

S-Strong; M-Medium; L-Low

SEMESTER III
CORE PAPER XII - ENERGY ECONOMICS

Unit I- Introduction to Energy Economics: 14 Hours
Definition and scope of energy economics- Evolution of energy markets and their structures-
Energy demand and supply dynamics-Role of energy in economic development-Global and
Indian energy scenario and trends

Unit II-Energy Demand Analysis:15 Hours
Factors affecting energy demand: price, income, technology, and policy-Elasticity of energy
demand- Time-series and cross-sectional analysis of energy demand-Energy consumption patterns
in different sectors: industrial, residential, commercial, and transportation-Energy efficiency
and conservation measures

Unit III-Energy Supply Analysis: 15 Hours
Classification of energy resources: fossil fuels, renewable energy, and nuclear energy- production
and distribution of energy resources-Cost structures of various energy sources-Environmental of
energy supply: pollution, climate change,and sustainability-Government policies and regulations
governing energy supply

Unit IV-Energy Pricing and Markets: 15 Hours
Pricing mechanisms in energy markets: cost-plus pricing, value-based pricing, and market-based
pricing Market structures in the energy sector: oligopoly, monopoly, and competitive markets-
Price volatility in energy markets and its impact on the economy-Energy trading, futures, and
derivatives markets -Implications of energy subsidies and taxation on market dynamics

Unit V-Energy Policy and Sustainability: 14 Hours
Energy policy formulation and implementation in India-Role of international organizations in
shaping energy policies-Energy security and geopolitical aspects of energy trade-Sustainable
development and the transition to renewable energy sources-Case studies on successful energy
energy policies and their impact on economic development

Textbooks:

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1	Peter M.Schwarz	Energy Economics	Routledge Publications	2022, 2nd Ed
2	Aline Henriet and Amélie Charles	"Energy Demand Analysis and Forecasting: Understanding the Fundamentals of the Energy Market"	Palgrave Macmillan	2019

References:

Sl.No	Author Name	Title of the Book	Publisher	Year & Edition
1	Iris Marie Mack	Energy Trading and Risk Management: A Practical Approach to Hedging, Trading, and Portfolio Diversification"	Wiley	2020
2	Richard Wolfson	Energy, Environment, and Climate	Norton &Company	2019

Pedagogy: Chalk & Talk, PPT, Peer Learning, Quizzalise

Course Designers:

1. Dr Kavitha N.V, Asst Professor, Department of Economics

2. Dr Padma Annakamu, Asst Professor, Department of Economics

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE24P2	DATA ANALYTICS WITH R	Practical	-	2	58	2

PREAMBLE

To enable the students
- To develop and apply skills in R software
- To learn procedures to formulated statistical operations in Research
- To enrich knowledge in data analytics.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to

CLO No	Course Outcomes	K - Level
CLO1	Identify the core concepts of the R programming language for data analytics	K2
CLO2	Design and produce statistical graphics in R	K3
CLO3	Apply statistical tools in R platform	K4
CLO4	Formulate and organize large amounts of complex data into information	K5
CLO5	Evaluate the effectiveness of different data analytical techniques for solving economic problems	K6

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	S	S
CLO2	S	S	S	S	S
CLO3	S	S	S	S	M
CLO4	S	S	S	S	S
CLO5	S	S	S	S	S

S - Strong; M-Medium; L-Low

Introduction to R
  ➢ Introduction to R programming language
  ➢ Data types and structures in R (vectors, matrices, data frames)
  ➢ Data import and export (CSV- Excel)
  ➢ R operators: Arithmetic, assignment, comparison, and logical operators
  ➢ Working with different data types; Vector creation and manipulation
  ➢ Miscellaneous functions: Sequence, repetition, sorting, generate random numbers,user-defined functions,Factor variables

Introduction to Data Visualization with R
  ➢ Basic Plotting types: Barchart, Pie Chart, Histogram, Density plot, Boxplot
  ➢ Plot customization: Adding legend, Adding color in plots, Adding axis labels and chart title, Modifying axis and scales

Basic Statistics with R
  ➢ Measures of central tendency: Mean,Median, Mode
  ➢ Measures of Variability: Standard deviation, Variance, Range
  ➢
Advanced Inferential Statistics with R
  ➢ Test with Proportion :T statistics, Z statistics ,Chi Square
  ➢ Test with variances: ANOVA: one way and two ways

Simple Linear Regression Modeling (SLRM):
  ➢ Linearity and normality
  ➢ Fitting SLRM,MLRM
  ➢ Storing and printing the regression results
  ➢ Interpretation of the regression results
  ➢ Maximum Likelihood Estimation, and Goodness-of-Fit measures

Text Book

S.No.	Authors	Title Of The Book	Publisher	Year & Edition
1	Seema Acharya	Data Analytics using R	McGraw Hill Education(India) Pvt. ltd	2018,1st Edition
2	Dr.Bhuvaneshwari V	Data Anaalytics with R programming	Scitech Publications (India) Pvt.Ltd.	2018,1st Edition

Reference Books

S.No.	Authors	Title Of The Book	Publisher	Year & Edition
1	Dr.Mark Gardener	Beginning R: The Statistical Programming Language	Wiley India Pvt.Ltd	2012,1st Edition
2	Robert I. Kabaoff	R in Action	Himal Impressions Delhi	2015,2nd Edition
3	Dr.Bharati Motwani	Data Analytics with R	Wiley India Pvt.Ltd	2019,1st Edition

Course Designers:
  1. Dr.C.Athena, Assistant Professor, Department of Economics
  2. Ms.Sobiya R, Assistant Professor, Department of Economics

Course Contents and Presentation Schedule- Data Analytics with R

Module No	Topic	No. of Periods	Content delivery methods	Participatory Learning
1	Open RStudio and create a new project, Run basic R commands	2	Demo	Hands-on training
2	Create vectors and matrices, Create data frames	2	Demo	Hands-on training
3	Import and export data from CSV file	3	Demo	Hands-on training
4	Arithmetic operators- Addition, Multiplication,Division,Substraction	3	Demo	Hands-on training
5	Assignment operators, Comparison operators, Logical operators	3	Demo	Hands-on training
6	Bar chart, Pie chart	2	Demo	Hands-on training
7	Density plot, Boxplot, Histogram	3	Demo	Hands-on training
8	Plot customization- Adding legend, Adding color, Adding axis labels and chart title, Modifying axis and scales	3	Demo	Hands-on training
9	Measures of central tendency	3	Demo	Hands-on training
10	Measures of Variability	3	Demo	Hands-on training
11	T-statistics	3	Demo	Hands-on training
12	Z-statistics	3	Demo	Hands-on training
13	Chi Square	3	Demo	Hands-on training
14	ANOVA: one way	3	Demo	Hands-on training
15	ANOVA: two way	3	Demo	Hands-on training
16	Linearity and normality- Plotting residuals, Checking normality	3	Demo	Hands-on training
17	Fitting SLRM	3	Demo	Hands-on training
18	Fitting MLRM	3	Demo	Hands-on training
19	Interpretation of the regression results	3	Demo	Hands-on training
20	Leverage Input: Various Cost Functions to be used:	3	Demo	Hands-on training

Department of Economics

M.A. Applied Economics

Syllabus
(2024 Batch)

PROGRAMME LEARNING OUTCOMES: (PLOs)

On completion of the programme students will be able to

PLO1: Demonstrate the knowledge of theories, policies, and empirical findings of Economics.

PLO2: Engage in scientific inquiry, critical thinking, using quantitative and qualitative methods.

PLO3: Access and extract data from multiple sources, analyse and interpret the results using quantitative and qualitative tools.

PLO4: Demonstrate competence in written and oral communication and convincingly present arguments with virtual tools.

PLO5: Apply knowledge of economics for team building and create entrepreneurial initiatives for livelihood and social development.

PROGRAMME SPECIFIC OUTCOMES (PSOs):

PSO1: Apply theories, models, and tools of Economics to analyze socio-economic issues and formulate viable solutions.

PSO2: Undertake scientific enquiry and research to resolve socio-economic problems

PSO3: Demonstrate professional competencies to investigate socio-economic issues, extracting qualitative and quantitative data, critically examining its impacts for resource allocation, distribution, and exchange.

PSO4: Engage in reflective thinking leading to self-learning and lifelong learning.

PSO5: Forge sustainable linkages with communities, thereby giving a boost to civic engagement

DEPARTMENT OF ECONOMICS
CHOICE BASED CREDIT SYSTEM (CBCS) &LEARNING
OUTCOMES - BASED CURRICULAR FRAMEWORK (LOCF)
M .A. Applied Economics (2024-2026 Batch) Semester III
SYLLABUS AND SCHEME OF EXAMINATION

Semester	Part	CourseCode	Title of Course	Course Type	Instruction hours /Week	Contact hours	Tutorial Hrs	Duration of Examination	Examination Marks			Credits
									CA	ESE	Total	
II/ III	III	MAE2411	Energy Economics	CC	6	73	2	3	25	75	100	6
III	III	MAE2412	Industrial Economics*	CC	5	73	2	3	25	75	100	4
III	III	MAE2413	Production and Operations Management	CC	5	73	2	3	25	75	100	4
III	III	MAE24P3	DataAnalytics with Python - Practical III	CC	4	58	2	3	25	75	100	2
III	III	MAE24E1/ MAE24E2	Welfare Economics / Tribal Development in India	DSE	5	73	2	3	25	75	100	4
III	III	MAE24S1	Research Methodology for Applied Economics	GE	3	45	-	3	-	100	100	4
III	III	MNM22CS2	Cyber security II	AEC	2	30	-	-	100	-	-	Gr
III	III		Job Oriented course#		-	40	-	-	-	-	-	-
III	III	MAE24COM	Comprehensive Exam – Online	GC	-	-	-	3	-	-	-	Gr

*Open Book Exam

Outside Class Hours

CC-Core Courses; AEC – Ability Enhancement Course; DSE – Discipline Specific Elective; GE-Generic Elective; GC-General Course; ACC – Additional Credit Course; CA–Continuous Assessment ESE-End Semester Examination Gr: Grade

Course Number	Course Name	Category	L	T	P	Credit
MAE2411	ENERGY ECONOMICS	Theory	73	2	-	4

PREAMBLE

To enable the students to understand the concepts and scope of energy economics within global and Indian context, analyse the interplay between energy demand and supply and its influencing factors and explore the complexities.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO Number	CLO Statement	Knowledge Levels
CLO 1	Understand the fundamental concepts of energy economics	K2
CLO 2	Experiment the role of energy policy in sustainable energy development	K3
CLO 3	Analyze evaluate and forecast the consumer demand, Energy Efficiency	K4
CLO 4	Analyze the pricing mechanisms and market failures in the energy sector, along with role of Government.	K4
CLO 5	Evaluate and assess the different classifications of energy resources and their environmental implications and cost structures associated with these resources.	K5

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOS	PLO1	PLO2	PLO3	PLO4	PLO5
CLO 1	S	M	L	M	M
CLO 2	S	S	M	M	M
CLO 3	S	S	S	M	M
CLO 4	S	S	S	S	S
CLO 5	S	S	S	S	S

S-Strong; M-Medium; L-Low

SEMESTER III

CORE PAPER XI - ENERGY ECONOMICS

Unit I-:Introduction to Energy Economics: **16 Hours**

Meaning of energy economics – Energy and Multidimensional Interactions - Alternative Classification of Energy- Evolutionary aspects of Energy – Energy Accounting Framework – Energy Audit - Energy Flow Diagram – Energy Balance

Unit-II:Energy Demand Analysis: **18 Hours**

Utility Maximisation – Cost minimization – Sector-wise analysis – Simple Payback Period, IRR, NPV, Cost of Energy saved and generated, Energy Chain, Primary energy analysis and Life Cycle Assessment – End-Use Method of Forecasting, Input–Output Model, Scenario and ANN based, Hybrid Approach - Energy Demand Management – Use of market-based incentives for Energy Efficiency

Unit- III:Energy Supply Analysis   **18 Hours**

Economics of fossil fuel supply – Exploration and production of energy resources – Classification of Crude oil, Natural Gas and Coal - Cost and Benefits -Renewable Energy Supply – Role and Drivers – Economics of Bio-fuels – Economics versus Financial Investment Analysis

Unit –IV:Energy Pricing and Markets   **18 Hours**

Basic Pricing model – Peak and off-peak pricing – Energy Taxes and Subsidies – Market Failures – Monopoly Problems – Externality and Public Goods – Government intervention and Role of Government – Energy Trading – OTC and auctions – Futures, options and Hedging

Unit –V:Energy- Environment Interactions   **18 Hours**

Energy-Environment interactions at regional level – Kyoto Protocol – Environmental Kuznets curve - Economics of Environment protection – Economic instruments for pollution control – Trade-off between Energy security and climate change – Global Economic crisis and Energy sector Investments

Textbooks:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	PeterM.Schwarz	Energy Economics	Routledge Publications	2022, 2nd Ed
2	Subhes C.Bhattacharyya	Energy Economics Concepts, Issues, Markets and Governance	Springer	2011, 1st ed

References:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Iris Marie Mack	Energy Trading and Risk Management: A Practical Approach to Hedging, Trading, and Portfolio Diversification"	Wiley	2014, 1st ed
2	Richard Wolfson	Energy, Environment, and Climate	Norton & Company	2019, 3rd ed

Pedagogy: Chalk & Talk, PPT, Peer Learning, Quizzalise

Course Designers:
1. Dr Kavitha N.V, Asst Professor, Department of Economics
2. Dr Padma Annakamu, Asst Professor, Department of Economics

Course Number	Course Name	Category	L	T	P	Credit
MAE2412	INDUSTRIAL ECONOMICS	Theory	73	2		4

PREAMBLE

This course provides an in-depth understanding of industrial economics, focusing on firm behaviour, market structures, industrial policies, financial systems, labour dynamics, and the emerging impact of Industry 5.0 on the industrial sector.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO Number	CLO Statement	Knowledge Level
CLO1	Explain the fundamental concepts of industrial organization, firm behaviour, and market structures.	K2
CLO2	Analyse the relationship between market structure, conduct, and performance, including pricing strategies, mergers, acquisitions, and industrial location theories.	K4
CLO3	Evaluate India's industrial policies, the role of public and private sectors, liberalization, privatization, and the impact of MNCs and technology transfers.	K6
CLO4	Assess various sources of industrial finance, including institutional finance, financial statements, and ratio analysis for industrial firms.	K3
CLO5	Critically examine industrial labour issues, employment patterns, labour market reforms, and the implications of Industry 5.0 on workforce dynamics.	K5

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	M	M	M	M
CLO2	S	S	S	M	S
CLO3	S	S	S	S	S
CLO4	M	S	S	S	S
CLO5	M	S	M	S	S

S - Strong; M-Medium; L-Low

SEMESTER III

CORE PAPER XI - INDUSTRIAL ECONOMICS

Unit – I: Industrial Organization and Firm Behaviour   **13 Hours**

Concept and organization of a firm: Ownership, control, and objectives-Passive vs. active behaviour of the firm-Market structure and firm behaviour: Sellers' concentration, product differentiation, and entry conditions-Industrial location theories (Weber, Sargent Florence) and factors affecting location-Emerging Trends: Industry 4.0 vs. Industry 5.0 – Human-centric production, AI-human collaboration, and sustainability

Unit – II: Market Structure, Performance, and Growth   **15 Hours**

Economies of scale and market structure-Market structure, profitability, and innovation-Theories of product pricing and investment expenditure-Mergers, acquisitions, and diversification: Theories and recent trends in India-Growth of firms: Size, profitability, constraints on growth-Productivity, efficiency, and capacity utilization: Concepts, measurements, and Indian Scenario-Impact of Industry 5.0 on firm strategies, market competition, and industrial innovation

Unit – III: Indian Industrial Growth and Policy Developments   **15 Hours**

Industrial classification and policies in India: Evolution and recent reforms-Role of Public and Private Sectors in industrial development-Impact of Liberalization, Privatization, and Globalization (LPG)-MNCs, technology transfer, and start-up ecosystem in India-Regional industrial growth and economic concentration-Industrial environmental challenges and sustainability policies (Pollution control, circular economy, ESG frameworks)-Sectoral analysis: Iron & Steel, Textiles, Sugar, Cement, Engineering Goods, Small-scale & Cottage industries-Technological Transformation: Role of AI, IoT, blockchain, and robotics in manufacturing

Unit – IV: Industrial Finance and Financial Assessment   **15 Hours**

Sources of industrial finance: Owned, external, institutional finance-Role and functions of IDBI, IFCI, SFCs, SIDC, and commercial banks-Emerging trends: Digital finance, fintech, and industrial credit-Financial statements: Balance Sheet, Profit & Loss Account, ratio analysis-Industry 5.0 and Smart Financing – Green bonds, impact investing, and sustainability-linked loans

Unit – V: Industrial Labour and Workforce Dynamics   **15 Hours**

Structure and employment dimensions of Indian Industry-Industrial relations, legislation, and labour market reforms-Exit policy, social security, and gig economy impact-Wages, bonus issues, and informal labour sector challenges-Future of Work in Industry 5.0: AI-human collaboration, skill requirements, automation, and reskilling initiatives

Text Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Barthwall, R.R	Industrial Economics	Wiley Eastern Ltd., New Delhi.	2021,5th ed
2	Shankar Gopal & R.L. Nolakha	Industrial Economics and Management Principles	Himalaya Publishing House	2023,1st ed

Reference Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	N. Mani	Industrial Economics	New Age International Publishers	2019
2	Thomas Pugel	International Economics	McGraw Hill	2020,3rd ed
3	Ranjana Seth	Industrial Economics	Ane Books	2021

Pedagogy : Chalk and Talk, PPT, Pair and Share, Peer Learning, Group Discussion

Course Designers:
1. Dr. C. Athena. Assistant Professor, Department of Economics
2. Dr.N.V.Kavitha, Assistant Professor, Department of Economics

Course Number	Course Name	Category	L	T	P	Credit
MAE2413	PRODUCTION AND OPERATIONS MANAGEMENT	Theory	73	2	-	5

PREAMBLE:

To enable the students to gain a comprehensive understanding of the strategies, methodologies, and best practices required to enhance productivity, reduce costs, and achieve sustainability and also to equip them with the knowledge and skills to make informed decisions, solve complex problems, and contribute to the growth and competitiveness of their organizations.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO Number	CLO Statement	Knowledge Level
CLO1	Explain the key concepts, terminologies, and fundamental principles of production and operations management, including capacity planning and process design.	K2
CLO2	Demonstrate the significance of product development, capacity planning, and project management in practical and real-world scenarios.	K2, K3
CLO3	Analyze production and operations processes to identify inefficiencies, enhance productivity, and eliminate bottlenecks.	K4
CLO4	Apply problem-solving techniques to address real-world production and operations challenges, including disruptions and crisis management.	K5
CLO5	Evaluate production and operations strategies using both qualitative and quantitative methods to support decision-making.	K6

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	M	M	M	M
CLO2	S	S	M	M	M
CLO3	S	S	S	M	S
CLO4	S	S	S	S	S
CLO5	S	S	S	S	S

S - Strong; M-Medium; L-Low

CORE PAPER XIII - PRODUCTION AND OPERATIONS MANAGEMENT

UNIT-I: Operations Management   **13 Hours**

Meaning of "Productions" – Meaning of "Operations" – Distinction between Production Management and Operations Management – Objectives – Functions - Historical Evolution – Scope – Recent Trends in POM – Operations Strategy – Business Strategies and Operations Function – Elements of operations strategy – Break even Analysis – Applications of Breakeven Analysis in Operations management.

UNIT-II: Demand Forecasting   **15 Hours**

Demand Forecasting – meaning – Uses – Need of demand forecasting – Types of Forecasts – Objectives of demand forecasting – Steps – Qualitative Methods of Forecasting – Jury of Executive opinion – Sales Composite method – Market Research Method – Delphi Methods - Quantitative Methods – Time Series Models – naïve approach – Moving Averages method – Exponential smoothing method – Causal Models – Trend Projection – Linear regression analysis.

UNIT-III: Product Development and Capacity Planning   **15 Hours**

Product – Meaning – Three levels of Product – New product Development process – Product Life Cycle concept - Factors to be considered in Product development Capacity - Definition – Types – Factors that determine effective capacity – Measurement of Capacity – Capacity Planning – Types of Capacity Planning – Optimum Plant Capacity – Determination of Economic Lot Size for Manufacturing – Long Range Capacity Planning – Calculation of Capacity Utilization Rate and Efficiency.

UNIT-IV: Scheduling of Operations: **15 hours**

Scheduling – Meaning – Objectives – Elements – Scheduling Process – Focused Production Systems – Sequencing – single criterion Priority rules – FCFS – SPT – LPT – LS – EDD – Dynamic Sequencing Rules – Dynamic Slack – Dynamic Slack per remaining operation – Critical Ratio Rule – Johnsons Rule – n jobs in two machines – n jobs in three machines.

UNIT-V: Scheduling by PERT and CPM   **15 Hours**

Project – Meaning - Project Planning - Project Scheduling - Project Controlling – Basic terminologies – CPM - Rules for construction – Network Computations - PERT Analysis – PERT Procedure – Differences between PERT and CPM – Cost considerations in PERT and CPM.

Text Books:

Sl.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Shridhara Bhat	Operations management	Himalaya Publishing House	2018
2	Russell& Taylor	Operations & Supply Chain Management	(International Student Version), Wiley	2015, 8th ed

Reference Books:

Sl.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Mohan Man, Gupta P. K., Swarup Kanti	Introduction to Management Science Operations Research	Sultan Chand & Sons	2014, 19th ed
2	Kapoor V.K	Operations Research: Quantitative Techniques for Management	Sultan Chand & Sons	2021, 9th ed

Pedagogy : Chalk and Talk, PPT, Pair and Share, Peer Learning, Group Discussion
Course Designers
   1. Dr. C. Athena. Assistant Professor, Department of Economics
   2. Dr. Padma Annakamu. S, Assistant Professor, Department of Economics

Course Number	Course Name	Category	L	T	P	Credit
MAE24P3	DATA ANALYTICS WITH PYTHON	Practical	58	2	-	2

PREAMBLE

This course covers the usage of Python for data analysis. Students will be allotted with hands-on training on data processing, data visualization, statistics and econometrics analysis, and interpretation.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO Number	CLO Statement	Knowledge Levels
CLO1	Use Python to understand economic data	K2
CLO2	Give insightful solutions to the market research problem.	K3
CLO3	Provide meaningful economic analysis of raw data through data processing, data visualization, statistics and econometrics analysis, Analytical tasks, Fundamental tasks, and techniques.	K4
CLO4	Analyse which platform is suitable for business	K5
CLO5	Demonstrate multivariate analysis using python	K6

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	M	S	S	M	L
CLO2	M	S	S	M	M
CLO3	S	S	S	M	M
CLO4	M	S	M	S	S
CLO 5	M	S	S	S	S

S - Strong; M-Medium; L-Low

PRACTICAL III - DATA ANALYTICS WITH PYTHON

Introduction to python
- Introduction to Python programming language
- Installing and loading packages and Data import and export(CSV-Excel)
- Basic Mathematics operators: Arithmetic, assignment, comparison, and logical operators
- Data types in Python: Numeric Types; Sequence Types: list, tuple, string ;Mapping Type,
- Functions: calling functions, creating function, built-in function, statistical function

Data Visualization with Python
- Basic Plotting types: Bar-chart, Pie Chart, Histogram, Density plot, Box-plot
- Plot customization: Adding legend, Adding color in plots, Adding axis labels and chart title, Modifying axis and scales

Basic Statistics with Python
- Measures of central tendency: Mean, Median, Mode
- Measures of Variability: Standard deviation, Variance, Range

Advanced Inferential Statistics with Python
- Test with Proportion: T statistics, Z statistics, Chi-Square
- Test with variances: ANOVA: one way and two ways
- Cross Tabulation

Linear Regression Modeling (LRM)
- Fitting SLRM(Storing and printing the regression results Interpretation of the regression results)
- MLRM(Storing and printing the regression results Interpretation of the regression results)
  - Factor Analysis

Text Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Bharati Motwani	Data Analytics using Python	Wiley	2020,7th ed
2	Sridhar	Python Programming	Pearson	2023,3rd ed

Reference Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	R.S.Salaria	Programming in Python	Khanna Publishing	2019
2	Reema Thareja	Python Programming	OUP India	2023,6th ed

Pedagogy: Lecture by chalk & talk, Power Point Presentation, Assignment, Quiz, Seminar

Course Designers:

1. Ms. Sobiya R , Assistant Professor, Department of Economics
2. Ms. Lekshmi.S, Assistant Professor, Department of Economics

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE24E1	WELFARE ECONOMICS	Theory	73	2	-	4

PREAMBLE

To evaluate the normative significance of economic events and issues from the framework of welfare economics.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO Number	CLO Statement	Knowledge Level
CLO1	Understand welfare economic theories and their applications.	K2
CLO2	Gain knowledge on economic models	K3
CLO3	Analyse the theories of Pareto to the real economy.	K4
CLO4	Examine the students on the implications of welfare policies	K5
CLO5	Evaluate recent developments in welfare economics	K6

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	M	M	M	L
CLO2	S	S	S	M	M
CLO3	S	S	S	M	M
CLO4	S	S	S	S	S
CLO 5	S	S	S	S	S

S - Strong; M-Medium; L-Low

ELECTIVE I - WELFARE ECONOMICS

Unit-I: Foundations of Welfare Economics   **14 Hours**

Historical Context of Welfare Economics - Benthamite and Utilitarian Approaches - Concepts of Total and Marginal Welfare - Utility Functions and Income Distribution - Interpersonal Comparisons of Utility

Unit- II: Consumer Welfare and Market Efficiency   **14 Hours**

Marshallian Welfare Economics - Consumer Surplus: Measurement and Critiques - Compensating Variation and Equivalent Variation - Hicksian Consumer Surplus and Tax Incidence Analysis - Market Failures and Their Implications for Welfare

Unit- III: Paretian Framework and Optimality   **16 Hours**

Pareto Optimality: Exchange and Production Optima - The Contract Curve and Social Optimum - Compensation Criteria: Insights from Kaldor, Hicks, and Scitovsky - Community Indifference Curves and Welfare Judgments - Application of Pareto Efficiency in Policy Evaluation

Unit- IV: Advanced Topics in Welfare Economics   **15 Hours**

Externalities: Types and Solutions - Public Goods and the Free-Rider Problem - The Role of Government in Welfare Economics - Pigovian Taxes and Subsidies - Social Welfare Functions: Bergson-Samuelson Framework – Recent Schemes by central and state government

Unit- V: Contemporary Issues and Future Directions   **14 Hours**

Behavioral Economics and Welfare Analysis - Dynamic Welfare Economics and Intertemporal Choices - The Role of Information Asymmetry in Welfare Economics - Environmental Economics and Sustainable Welfare - Recent Developments in Cost-Benefit Analysis

Text Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Henderson, J.M., and R.E. Quandt	Microeconomic Theory: A Mathematical Approach	McGraw Hill, New Delhi	2003
2	Furburton & Richter	Institutions and Economic Theory	Dryden Press	2006

Reference Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Ahuja H.L.	Advanced Economic Theory	S. Chand Co	2017
2	Dominick Salvatore	Microeconomic Theory and applications	Oxford University Press	2008

Pedagogy: Lecture by chalk & talk, Power Point Presentation, Assignment, Quiz, Seminar

Course Designers:

1. Dr. Dhanya K S, Assistant Professor, Department of Economics
2. Ms.Sobiya. R, Assistant Professor, Department of Economics

Course Number	Course Name	Category	L	T	P	Credit
MAE24E2	TRIBAL DEVELOPMENT IN INDIA	Theory	73	2	-	4

PREAMBLE

To enable the students to understand the multifaceted aspects of tribal communities, their challenges, and the strategies employed for their holistic development.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO Number	CLO Statement	Knowledge Level
CLO1	Know and understand the various Policies and Plans implemented by the Indian government for tribal development and also for PVTGs	K2
CLO2	Understand the importance of quality control and improvement techniques, Total Quality Management, and how to apply them in real-world situations.	K2, K3
CLO3	Evaluate the various development interventions aimed at improving the quality of life among tribal communities, including sustainable livelihoods, education, and healthcare.	K4
CLO4	Analyse the unique socio-economic challenges faced by tribal populations, including issues related to land rights, education, healthcare, and livelihoods.	K5
CLO5	Critically analyse tribal development issues, contribute to informed policy discussions, and work towards inclusive and sustainable development in India.	K6

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	M	M	M	S
CLO2	M	S	M	M	M
CLO3	S	S	S	S	S
CLO4	S	S	S	S	S
CLO5	S	S	S	S	S

S - Strong; M-Medium;L-Low

ELECTIVE I - TRIBAL DEVELOPMENT IN INDIA

Unit-I: Introduction to Tribal Economics   **15 Hours**

Definition and Characteristics of Tribal Economics; Classification of Tribal Economics and their Economic activities; Theories of Tribal Development: Isolationist, Assimilationist and Integrationist; Problems of Particularly Vulnerable Tribal Groups (PVTGs);

Unit-II: Displacement, industrialization and Urbanization in Tribal Areas   **14 Hours**

Land, Forest and Water issues in tribal areas; Impact of Industrialization and Urbanization on Tribal's; economics exploitation and Displacement of Tribal's; Role of NGOs in Tribal Economic Recovery; Tribal Displacement and Rehabilitation Policies (Dams, Mines, SEZs);

Unit-III: Tribal Development & Policies   **15 Hours**

Institutional Framework and Protections (5th and 6th Schedule, PESA, FRA); Tribal Sub-Plan (TSP) and Special Programs (PVTGs, DNTs, NTs); Role of Cooperatives, SHGs and Microfinance in Tribal Development; Market Integration and tribal Entrepreneurship - Schemes and Opportunities for Tribal Development.

Unit-IV: Sustainable Development and Livelihoods   **14 Hours**

Forest Economy and Tribal Dependence on Natural Resources; Climate Change and its impact on Tribal livelihood; Alternative livelihood – Eco tourism, handicrafts and Traditional knowledge based industries; Technology and Digital Divide among Tribal Populations; Impact of Mass Media and Education on Tribal Development.

Unit-V: Tribal Communities in Tamil Nadu   **15 Hours**

Classification of tribes in Tamil Nadu: on the Basis of Geographical Location, on the Basis of Language, on the Basis of Race and on the basis of Source of Subsistence; Role of State and Local Governance in Tamil Nadu's Tribal Development; Special focus on the six PVTG that are there in Tamil Nadu.

Text Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Virginia Xaxa	State, Society and Tribes	Pearson	2008,12^{th} ed
2	Dev Nathan &Virginius Xaxa	Social Exclusion and Adverse Inclusion: Development and Deprivation of Adivasis in India	Oxford University Press	2012,8^{th} ed

Reference Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Gaya Pandey	Development Anthropology	Concept Publishing Company	2008,1^{st} ed
2	P. K. Mohanty	Development of Primitive Tribal Groups in India	Gyan Book	2002,5^{th} ed

Pedagogy : Chalk and Talk, PPT, Pair and Share, Peer Learning, Group Discussion

Course Designers

1. Dr. C. Athena. Assistant Professor, Department of Economics
2. Ms. Muskan Maheshwari, Assistant Professor, Department of Economics

Course Number	Course Name	Category	L	T	P	Credit
MAE24S1	RESEARCH METHODOLOGY FOR APPLIED ECONOMICS	Theory	45		-	4

PREAMBLE

This course aims to provide basic ideas on how to think as a researcher, the various considerations involved in the practice of social research and how these relate to the strategy and design of research.

COURSE LEARNING OUTCOMES

On the successful completion of the course, students will be able to:

CLO Number	CLO Statement	Knowledge Level
CLO1	Understand research process, philosophy and values in social sciences	K2
CLO2	Identify the research strategies best suited for particular types of research questions and analysis	K3
CLO3	Critically reflect upon issues of ethics and role of the researcher	K4
CLO4	Describe Mechanics of writing a research Report	K5
CLO5	Examine professional Ethics, Scientific Misconduct, Plagiarism	K6

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOs	PO1	PO2	PO3	PO4	PO5
CLO1	S	S	M	M	L
CLO2	M	S	S	M	M
CLO3	M	S	M	M	M
CLO4	M	M	M	S	M
CLO5	M	S	M	M	M

S–Strong;M–Medium;L-Low

RESEARCH METHODOLOGY FOR APPLIED ECONOMICS

Unit- I: Introduction to Research & Research Methods   **7 hours**

Meaning of Research – Objectives –Types of research – Significance – Research Process – Criteria for Good Research, Philosophy of Social Science Research - Relevance of Social Science Research - Objectivity and Values in Social Sciences.

Unit-II: Research Formulation   **9 hours**

Defining and formulating the research problem - Importance of literature review in defining a research problem – Literature review – Primary and secondary sources – Critical literature review – Identifying gap areas from literature review

Unit- III: Research design and methods   **9 hours**

Research design – Need of research design – Features of good design – Induction, Deduction .Developing a research plan - Exploration, Description, Diagnosis, Experimentation , Determining experimental and sample designs.

Unit- IV: Data Collection and analysis   **9 hours**

Execution of the research - Observation and Collection of data - Methods of data collection – Sampling Methods- Data Processing and Analysis strategies - Data Analysis with Statistical Packages - Hypothesis testing -Development of working hypothesis ,Generalization and Interpretation.

Unit- V: Reporting writing and Research Ethics   **11 hours**

Structure and components of scientific reports -Types of report – Different steps in the preparation – Layout and structure – Bibliography, referencing and footnotes - Use of visual aids –Ethical issues - ethical committees – Copyright – Reproduction of published material – Plagiarism - Citation and acknowledgement - Reproducibility and accountability.

Text Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Kothari,C. R.	Research Methodology: Methods and Techniques	New Age International Publisher	2021,7^{th} ed
2	Baronov,D.	Conceptual Foundations of Social Research Methods,	Paradigm Publishers	2004

Reference Books:

S.No	AuthorName	Title of the Book	Publisher	Year and Edition
1	C.R.Kothariand Gaurav Garg	Research Methodology: Methods and Techniques	New Age International Publishers	2019
2	Yogesh Kumar Singh	Fundamental of Research Methodology and Statistics	New Age International Publishers	2006,3^{rd} ed

Pedagogy: Chalk &talk, Power Point Presentation, Case study, Assignment, Quiz,Seminar
Course Designers:
1. Ms Lekshmi.S, Assistant Professor, Department of Economics
2.. Ms Sobiya . R , Assistant Professor, Department of Economics

M.A APPLIED ECONOMICS
CHOICE BASED CREDIT SYSTEM (CBCS) &
LEARNING OUTCOMES - BASED CURRICULUM FRAMEWORK (LOCF)
SCHEME & SYLLABUS OF EXAMINATION

2024-26 Batch

Semester IV

Sem	Part	Course Code	Title of the Course	Course Type	Instruction Hours/Week	Contact Hours	Tutorial Hours	Duration of Examination	CA	ESE	Total	Credits
									Examination Marks			
IV	III	MAE2414	Econometric Methods	CC	6	88	2	3	25	75	100	5
IV	III	MAE2415	Financial Economics	CC	6	88	2	3	25	75	100	4
IV	III	MAE24E3/ MAE24E4	Economics of Marketing / Behavioural Economics	DSE	6	88	2	3	25	75	100	4
IV	III	MAE24PROJ	Project Work and Viva-Voce	DSE	12	-	-	-	25	75	100	6
IV	III	MAE24A1/ MAE24A2	Economics of Health and Education / Economics of Banking and Insurance	ACC	SS	-	-	3	25	75	100	5*
Total											2200+100	90+5

*Credits applicable to candidates who take up Advanced level course examination

CC – Core Courses   **CA – Continuous Assessment**

ESE–End Semester Examination   **DSE – Discipline Specific Elective**

ACC – Additional Credit Course   **SS – Self Study**

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
MAE2414	ECONOMETRIC METHODS	THEORY	88	2	-	5

Preamble

The course intends to provide a thorough and sound understanding of the essential theoretical base, an introduction into the important and useful techniques of modeling and also an understanding of the broad applications of econometrics.

Prerequisite

Basic Knowledge in econometrics

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Understand definition, significance and scope of econometrics	K2
CLO2	Derive and interpret OLS estimators and inference results	K3
CLO3	Diagnose model violations and justify robust inference	K4
CLO4	Incorporate qualitative variables and test structural change	K5
CLO5	Explain econometric modelling logic and assumptions	K6

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	M	L
CLO2	S	S	S	M	M
CLO3	S	S	S	M	M
CLO4	S	S	S	S	S
CLO5	S	S	S	S	S

S-Strong; M-Medium; L-Low

ECONOMETRIC METHODS- MAE2414- 88 HRS

Unit I   **18 Hrs**

Meaning, definition, purpose, and scope of econometrics -Applications in economics and social Sciences-Types of data: cross-sectional, time series, Panel-Classical linear regression model

Unit II   **18 Hrs**

Derivation of Ordinary Least Squares (OLS) estimators -Gauss–Markov theorem and BLUE properties- confidence intervals- Core assumptions: linearity, exogeneity, homoscedasticity, no autocorrelation, no perfect multicollinearity

Unit III   **17 Hrs**

Functional form misspecification and omitted variable bias- Multicollinearity: causes-detection, interpretation- Heteroskedasticity and autocorrelation -Measurement error and introductory endogeneity

Unit IV   **17 Hrs**

Dummy variables: definition, use, and interpretation -Dummy variable trap and interaction Terms-Structural breaks and Chow Test-ANOVA and ANCOVA logic (conceptual overview)

Unit V   **18 Hrs**

Introduction - adaptive expectations models, partial adjustment models, distributed lag models; Koyck's model, Almon lag, polynomial distributed lag models-goodness of fit

Text Book

S.No	Authors	Title	Publishers	Year and Edition
1	A Koutsoyiannis	Theory of Econometrics	Palgrave Macmillan	2001 and 2nd edn.
2	Damodar N Gujarati	Basic Econometrics	McGraw Hill Publication	2009 and 5th edn.

Books for Reference

S.No	Authors	Title	Publishers	Year and Edition
1	WoolridgeM Jeffrey	Introductory Econometrics: A Modern Approach	Cengage Learning	2012 and 5th edn.
2	G.M.K. Madnani	Introduction to Econometrics: Principles and Applications	Oxford & IBH publishing co	2015 and 8th edn.

Pedagogy

- PowerPoint Presentations, Group Discussion, Seminar, Quiz Assignment, Experience Discussion

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
MAE2415	FINANCIAL ECONOMICS	THEORY	88	2	-	4

Preamble

To enable the students to understand investment alternatives on key investment attributes.

Prerequisite

Basic Knowledge in Money and capital market

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Understand investment alternatives on key investment attributes	K2
CLO2	Deliberate the implications of the efficient market hypothesis for investment analysis.	K3
CLO3	Distinguish technical analysis from fundamental analysis.	K4
CLO4	Estimate the price of a bond and calculate various measures of bond yield	K5
CLO5	Assess and design the suitable investment plan	K6

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	M	M	M	L
CLO2	S	S	S	M	M
CLO3	M	S	S	M	M
CLO4	M	S	S	M	M
CLO5	S	S	S	S	S

S-Strong; M-Medium; L-Low

FINANCIAL ECONOMICS - MAE2415- 88 HRS

Unit I   **16 Hrs**

Introduction to financial economics – Importance – Components of Financial System – Structure and Functions – Capital Market – Functions of capital Market - Primary Market – Types – Secondary Market – Economic and Accounting Profit – Conflict between Economic and Accounting Profit

UNIT II   **18 Hrs**

Valuation of Bonds and Stocks - Bond Yield - Yield to Maturity - Equity Valuation: Dividend Discount Model, The P/E Ratio Approach - Modigliani and Miller Hypothesis - Brownian motion.

UNIT III   **18 Hrs**

Types of risk - Computing historical returns - average annual returns - variance of returns - Measurement of Risk and Return of an asset – Portfolio - Determinants of Beta - Risk-Return trade off.

UNIT IV   **18 Hrs**

Cost of Debt - Cost of Preference Capital and Equity Capital - The capital market line - the capital asset pricing model - use of the CAPM model in investment analysis and as a pricing formula - the beta of an asset and of a portfolio - security market line

UNIT V   **18 Hrs**

Derivatives: Types and uses - Forward Contracts - Futures Contract - Cost of Carry model - Expectation model - Relation between Spot and Future Prices - forward vs future contract - Hedging - Options: types - value of an option - Pay-Offs - the Put Call Parity Theorem - Binomial option pricing model (BOPM) - Black-Scholes option pricing model - Applications of Quantum in option pricing and portfolio optimization

Text Book

S.No	Authors	Title	Publishers	Year and Edition
1	Donald E. Fischer and Ronald J. Jordan	Security Analysis and Portfolio Management	Prentice Hall India	2015 and 7th edn.
2	John C. Hull	Options, Futures and other derivatives	Pearson	2022 and 11th edn.

Books for Reference

S.No	Authors	Title	Publishers	Year and Edition
1	G.Yoganandam	Financial Economics	New century Publications	2021and 1st edn.
2	B.E. Baaquie	Quantum Finance: Path Integrals and Hamiltonians for Options and Interest Rates	Cambridge	2007 and 1st edn.

Pedagogy

PowerPoint Presentations, Group Discussion, Seminar, Quiz, Assignment

COURSE CODE	COURSE TITLE	Category	L	T	P	Credit
MAE24E03	ECONOMICS OF MARKETING	Theory	88	2	-	4

Preamble

This paper introduces the economic principles, functions, strategies, and emerging trends of marketing, with a focus on Indian markets and policy perspectives.

Prerequisite

Students are expected to have a basic knowledge of micro and macroeconomics, familiarity with statistical tools, exposure of management or introductory marketing concepts and skills in critical thinking, data interpretation and case analysis.

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Understand core marketing concepts and its distinction from selling.	K1
CLO2	Analyse marketing functions, channels, and costs for efficiency.	K2
CLO3	Apply economic principles to pricing, competition, and marketing strategies.	K3
CLO4	Evaluate trends, policies, and global frameworks in marketing.	K4
CLO5	Develop strategic solutions and marketing plans based on case studies and real-world scenarios.	K5

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO 2	PLO 3	PLO 4	PLO 5
CLO1	S	M	S	S	S
CLO2	S	S	S	S	M
CLO3	S	S	S	M	S
CLO4	S	M	S	S	S
CLO5	S	M	S	S	S

S- Strong; M-Medium

Unit I   **18 Hrs**

Concept and scope of marketing; evolution of marketing thought-Marketing vs. Selling: Economic and behavioural perspectives-Role of marketing in economic development and welfare- -Market structures and marketing practices: Perfect competition, monopoly, monopolistic competition, and oligopoly implications-Demand forecasting techniques for marketing decisions

Unit II   **17 Hrs**

Functions of marketing -Marketing channels -Marketing costs and margins –methods of computation and analysis-Price spread and producer's share in consumer's rupee-Market integration – horizontal, vertical, spatial, and temporal-Role of intermediaries in efficiency and inefficiency

Unit III   **18 Hrs**

Agricultural marketing: Characteristics, problems, reforms, and policies in India-Regulated markets, e-NAM, APMC Acts, and contract farming-Industrial product marketing: Features, segmentation, and positioning-Marketing of services: Growth, challenges, and role in Indian economy-Case studies -Role of government and cooperative marketing institutions

Unit IV   **17 Hrs**

Economics of product pricing: Cost-based, demand-based, and competition-based approaches-Price discrimination and its marketing implications-Pricing strategies for new products, product life cycle pricing, and penetration vs. skimming pricing-Competition, collusion, and cartelization in markets-Marketing strategies under monopolistic competition and oligopoly-Innovation, advertising, and brand loyalty as economic tools in marketing

Unit V   **18 Hrs**

Digital and online marketing: E-commerce, platforms, and consumer welfare-Sustainable marketing: Green marketing, circular economy, and consumer responsibility-Rural marketing -Globalization and international marketing strategies-WTO and trade policies affecting Indian marketing system-Public policy, regulation, and consumer protection in marketing

Textbook

S.No	Authors	Title Of The Book	Publisher	Year & Edition
1	R.K. Rout, S.N. Mishra	Text book of Economics and Marketing	BrillionPublishing	2021and 5th edn.
2	Philip Kotler, Kevin Lane Keller, Alexander Chernev, Jagdish N. Sheth, G. Shainesh	Marketing Management	Pearsons Education	2024 and 16th edn.

Reference

S.No	Authors	Title Of The Book	Publisher	Year & Edition
1	Dr. Ashish P. Mohata, Prin. Dr. Prasad A. Khanzode, Mr. Rohit D. Akolkar, Mrs. Anita A. Vishwakarma	Marketing Management	Eagle Leap Printers Pvt Ltd	2023 and 1st edn.
2	Seema Prabhu and Basil Hans	Economics of Marketing	HSRA Publications	2023 and 1st edn.
3	Sulthan Kermally	Marketing and Economics: An Integrative Approach to Making Effective Business Decisions in the Global Marketing	Vernon Press	2016 and 1st edn.

Pedagogy:

Chalk and Talk, PPT, Group Discussion, Debate and Seminar, Blended Learning

COURSE CODE	COURSE TITLE	Category	L	T	P	Credit
MAE24E4	BEHAVIOURAL ECONOMICS	Theory	88	2		4

Preamble

To provide an understanding of the principles and policy implications of behavioral approachesthrough c studies

Prerequisite

Students are expected to have a basic knowledge of microeconomics

Course Outcomes

On the successful completion of the course, students will be able to:

CLO Number	CLO Statement	Knowledge Level
CLO1	Define and explain the theories.	K2
CLO2	Understand the theories of consumer behavior	K3
CLO3	Identify the choice under uncertainty.	K4
CLO4	Identify and examine the alternative theories.	K5
CLO5	Evaluate the market structures	K6

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	M	M	M	L
CLO2	S	S	M	M	M
CLO3	M	S	S	M	M
CLO4	S	S	S	M	M
CLO5	S	S	M	M	S

S - Strong; M-Medium; L-Low

UNIT I   **16 Hrs**

Neo-classical and behavioural approaches to study economics - Origin of behavioural economics – Methods - Economic Man's Rationality - Neuroeconomics – Decision making based on reward – Methods to measure the function of Brain - Decision-making under certainty – Consumer Behaviour: rational preference – Menu dependence and decoy effect – Anchoring and adjustment – Heuristics : Representativeness, Substitution

UNIT II   **18 Hrs**

Preferences and Choices: The standard model- Axioms, assumptions and definitions-The neuro-scientific basis of utility- Decision making under risk and uncertainty: Prospect Theory-Reference points- Fallacies - Shape of utility function- Decision weighting- Application:Case studies on Endowment Effect and Loss Aversion.

UNIT III   **18 Hrs**

The Discounted Utility Model: Origin and features - Methodology- Inter temporal Choice Models: Time preference- Time inconsistent preferences- Hyperbolic discounting- Preferences over profiles – Bias – Focusing illusion - Application: Case study

UNIT IV   **18 Hrs**

Nash equilibrium in pure strategies – payoff matrix – Prisoners' dilemma - Mixed strategies - Bargaining-Signaling-Learning – Case study

UNIT V   **18 Hrs**

Altruism, envy, fairness, justice, intentions, trust, reciprocity, Limited Strategic Thinking – Norms and Identity – Normative Behavioral Economics – Libertarian paternalism - Nudge: Nudge vs. boost – Public Policies – economics of happiness - Reciprocity models- Application: Case studies on Public goods and free riding.

Text Books

S.No.	Author Name	Title of the Book Publication	Publisher	Year and Edition
1	Nick Wilkinson and Matthias Hales	An Introduction to Behavioral Economics	Palgrave Macmillan	2017 and 3rd edn.
2	Erik Angner	A Course in Behavioral Economics	Palgrave Macmillan	2012 and 2nd edn.

Reference Books

S.No	Author Name	Title of the Book	Publisher	Year of Publication
1	Richard Thaler and Carl Sunstein	Behavioural Economics	Routledge	2011 and 1st edn.
2	Phillip Corr and Anke Plagnol	Behavioural Economics the basics	Routledge	2018 and 1st edn.

Pedagogy

Lecture by chalk & talk, Power Point Presentation, Assignment, Quiz, Seminar

COURSE CODE	COURSE TITLE	Category	L	T	P	Credit
MAE24A1	ECONOMICS OF HEALTH AND EDUCATION	THEORY				5

Objective

- To the study of the core concepts of health and education. It also provides theoretical and practical knowledge about the components of human capital in the frame work of economic theory.

ECONOMICS OF HEALTH AND EDUCATION - MAE24A1

Unit I

Education in Economic Theory - Human Capital and the Rate of Returns - Cost-Benefit Analysis - Private versus Social Rate of Return - General Earnings Function - Egalitarian and Elite Approach - Critique of the Human Capital Theory - Signalling - Dual Market Hypothesis - Social Choice Approach - Capability Approach.

Unit II

Public Good: Merit Good, Public Good, Mixed Good, Non-merit Good - Global Private Goods: Commodification of Education - Knowledge and the Failure of the Market - Incompatibility between the Market and Equity - Gender and caste discrimination.

Unit III

Public and Private Financing of Education – Public-Private Partnership - Regulation and Efficiency - Choice of School, Efficiency and Quality- Challenges facing Indian Education and Policy Initiatives.

Unit IV

Health and health care, life expectancy and mortality rates, morbidity - Health measurement, determinants, and long-run trends- Demand for healthcare: Grossman's model - information asymmetry, and the health insurance market, physician induced demand, adverse selection and moral hazard - Supply of HealthCare: Marketplace interaction between hospitals,patients and doctors.

Unit V

Demand for health insurance: Risk-averse decision-maker - Supply of health insurance: stability of insurance market- Selection and Self- identification - Group insurance- Social Insurance- Importance of health insurance in developing countries: problems and challenges.

Text Books

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Chattopadhyay.S	Education and economics: Disciplinary evolution and policy discourse.	OUP Catalogue	2012, illustrated ed
2	Sherman Folland	The Economics of Health and Health care	Routledge	2024 and 9th edn.

Reference Book

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Samuel Akinyemi	The Economics of Education	StrategicBook Publishing	2013 and 1st edn.
2	Micheal Lovenhiem	Economics of Education	Worth Publishers Inc	2019 and 1st edn.

Course Designers:

1. Dr.S.Padma Annakamu
2. Ms.Sobiya.R

COURSE CODE	COURSE TITLE	Category	L	T	P	Credit
MAE24A2	ECONOMICS OF BANKING AND INSURANCE	THEORY				5

Objective

- This paper is designed to develops the caliber of the students to understand the banking procedure with its command on money inflow in the market and thereby be more adept in taking up banking sector-related careers

ECONOMICS OF BANKING AND INSURANCE - MAE24A2

Unit I

Risk, Uncertainty and Asymmetric Information - Markets Contingent Consumption- Utility Functions and Probabilities- Expected Utility Theory in Insurance Market- Risk pooling- risk spreading- risk transfer- Quality Choice – Moral Hazard and Adverse Selection - Signaling - The Sheepskin Effect- Incentives- Monitoring Costs.

Unit II

Monetary Policy of RBI – Nationalization and Credit Planning- Monetary Targeting- Multiple Indicator Approach and Liquidity Adjustment Facilities – Liabilities: deposits, non-deposit resources - Assets – Lending and Portfolio Choice and Aspects- Innovations- Risk Management - Non-Bank Financial Intermediaries (NBFIs) –Small Savings, Provident Funds and Pension Funds – Loan Companies, Investment Companies, Hire-Purchase Finance- Lease Finance- Housing Finance.

Unit III

Types - Contracts: Term and Cash Insurance- Level Premium Concept- Life Insurance Products- Whole Life Insurance- Variation - Indeterminate Premium - General Classifications - Computation of Life Insurance Premium- Benefits-Certain and Benefits-Uncertain contracts.

Unit IV

Individual Health and Disability Income Insurance & its types- Coverage: Hospital Disability Income Insurance- Need: Short Term Versus Long Term- Elderly- Long Term Care Insurance- Employee Benefits: Group, Life and Health Insurance- Group Insurance Plans.

Unit V

Rate Making, Underwriting, Production, Claim Settlement, Re insurance- Life Insurance Industry in India- Government Units- Private Players- Emerging Scenario- Marketing Systems- Distribution Channels: Agents and Brokers- Changes - Rationale of Regulation- Function of IRDA, IITDA - Issues.

Text Books

S.No	AuthorName	Title of the Book	Publisher	Year and Edition
1	BholeL M	Financial Institutions and Markets	Tata Mc Graw Hill.	2017 and 6th edn.
2	Carmichael,J.& M.Pomerleano	The Development and Regulation Of Non-Bank Financial Institution	Washington, DC: World Bank.	2002

Reference Books

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	HalR.Varian	Intermediate Microeconomics	W W Norton and Company.	2010 and 8th edn.
2	Grant,K., andR.Grant.	Health Insurance and the Poor in Low-Income Countries.”	Tata Mc Graw Hill	2005 and illustrated edn.

Course Designers

1. Dr.S.Padma Annakamu
2. Ms.Sobiya.R