

SUBJECT: ECONOMICS (M.A.)	
<p>PROGRAMME SPECIFIC OUTCOMES (PSOs)</p> <p>ECONOMICS (M.A)</p>	<p>PSO1: Critically evaluate the underlying assumptions driving economic theories and policy decisions, and their implications for economic analysis.</p> <p>PSO2: Clearly convey economic concepts, data interpretations, and analytical findings in both English and an Indian language, through various communication formats including written reports and oral presentations.</p> <p>PSO3: Collaborate effectively with peers and stakeholders to integrate diverse view points, mediate differing opinions, and achieve collective goals in economic projects and discussions.</p> <p>PSO4: Demonstrate the ability to develop and implement innovative economic strategies and entrepreneurial ventures, leveraging economic theories and market insights.</p> <p>PSO5: Assess and apply ethical frameworks to economic issues, ensuring that economic practices and decisions align with principles of fairness, transparency, and social responsibility.</p> <p>PSO6: Address environmental challenges within economic contexts, promoting strategies and solutions that support sustainable development and responsible resource management.</p>
COURSE OUTCOME FOR FIRST YEAR	
	Semester I
<p>ECO-411:</p> <p>Micro Economic Theory I</p>	<p>CO2: Analyze the theory of production and cost, focusing on production functions, returns to scale, least cost combination of inputs, and traditional and modern cost theories, including empirical evidence and the derivation of cost functions from production functions.</p> <p>CO3: Examine price and output determination in different market structures, including perfect competition, monopoly, and monopolistic competition, with an emphasis on equilibrium analysis, price determination, and welfare aspects.</p>

	<p>CO4: Explore the behavior of firms and pricing strategies under oligopoly, including non-collusive models (such as Cournot, Bertrand, and Stackelberg) and collusive models (such as cartels and price leadership), as well as the dynamics of price and output determination in monopsony and bilateral monopoly situations.</p> <p>CO5: Apply economic theories to practical scenarios, demonstrating an understanding of how economic theory informs real-world market behavior and decision-making processes.</p>
<p>ECO-412: Macro-Economic Theory I</p>	<p>CO1: Understand the basic theoretical framework</p> <p>CO2: Examine the supply of money through various models, including financial inter mediation, the behavioural model of money supply determination, and the RBI's approach to controlling money supply and understanding the money multiplier.</p> <p>CO3: Analyze the Neo-Classical and Keynesian synthesis, including the IS-LM models and their extensions, to understand the interaction between goods and money markets and the relative effectiveness of monetary and fiscal policies.</p> <p>CO4: Explore extensions of the IS-LM models to incorporate labour markets and flexible prices, and understand the implications of these extensions for macroeconomic policy and analysis.</p> <p>CO5: Relate macroeconomic theories to real-world situations, including the impact of macroeconomic policies on the economy, and apply these theories to analyze economic phenomena such as inflation, business cycles, and policy effects.</p>
<p>ECO-413: Statistical Methods</p>	<p>CO1: Understand and apply fundamental statistical methods, including measures of central tendency, dispersion, skewness, moments, kurtosis, and index numbers, to analyze economic data.</p> <p>CO2: Utilize correlation and regression analysis techniques, including simple correlation, Spearman's rank correlation, and the method of least squares, to analyze relationships between economic</p>

	<p>variables and apply partial and multiple regression methods.</p> <p>CO3: Comprehend and apply the theory of probability, including classical and empirical definitions, laws of addition and multiplication, conditional probability, and mathematical expectation, to solve economic problems.</p> <p>CO4: Analyze theoretical distributions (Binomial, Poisson, and Normal), and understand the concepts of estimation, sampling distribution, and desirable properties of estimators, including hypothesis formulation, Type I and Type II errors, and the use of statistical tests (Z, t, Chi-square, F).</p> <p>CO5: Apply statistical software to perform data analysis, interpret results, and utilize statistical methods effectively in economic research and problem-solving.</p>
<p>ECO-414:</p> <p>Environmental Economics</p>	<p>CO1: Understand key concepts in environmental economics, including natural resources, pollutants, and the inter-linkages between environment and economy, and analyze the management of renewable and non-renewable resources using models like Hotelling's and concepts related to common pool resources.</p> <p>CO2: Examine market failures related to environmental quality, including environmental externalities, and evaluate various policy measures for optimal pollution control such as Pigovian taxes, Coase's bargaining solution, tradable pollution rights, command and control measures, and international treaties.</p> <p>CO3: Apply methods for the valuation of environmental goods and services, including direct and indirect valuation methods, willingness to pay and accept, and various approaches such as the Hedonic Price theory, Averting Expenditure method, Travel Cost method, and Contingent Valuation method.</p> <p>CO4: Analyze the concept of sustainable development, including the limits to growth hypothesis, issues of irreversibility and uncertainty, the trade-offs between environment and development, and the principles and indicators of sustainability.</p>

	<p>CO5: Assess the role of institutions in environmental management and the importance of integrated environmental and economic accounting in the context of sustainable development.</p>
<p>ECO-415: International Trade and Finance</p>	<p>CO1: Understand and apply classical and modern theories of international trade, including opportunity costs, comparative cost, Heckscher-Ohlin theory, and the theorem of factor price equalization, and analyze empirical evidence related to these theories.</p> <p>CO2: Explore trade theories that incorporate economies of scale and imperfect competition, such as the Imitation Gap theory, Technological Gap and Product Cycle theories, Linder-Kravis model, and models of product differentiation and intra-industry trade, including Krugman and Lancaster models.</p> <p>CO3: Analyze the theory and impact of trade interventions and protection measures, including tariffs, quotas, and voluntary export restraints, and understand their welfare implications using concepts like Stolper-Samuelson theorem, Metzler's paradox, and the political economy of non-tariff barriers.</p> <p>CO4: Examine the theory and effects of regional trade blocs and economic cooperation, including the static and dynamic effects of customs unions, the economic progress and rationale behind trading blocs such as the EU, NAFTA, SAARC/SAPTA, and ASEAN.</p> <p>CO5: Assess the impact of globalization and liberalization on trade policies and economies, and critically analyze the effects of trade theories and policies on the global flow of goods, services, and capital.</p>
	<p>Semester II</p>
<p>ECO-421: Micro Economic Theory II</p>	<p>CO1: Critically evaluate alternative theories of the firm, including marginal analysis, Baumol's sales revenue maximization model, Williamson's managerial discretion model, and full cost pricing rules.</p> <p>CO2: Analyze advanced theories of the firm such as Marris's managerial enterprises model, Bain's limit pricing theory with recent</p>

	<p>developments including Sylos-Labinis model, and behavioral and game theoretic models of firm behavior.</p> <p>CO3: Understand and apply distribution theories, including the neo-classical approach of marginal productivity theory, the product exhaustion theorem, and theories of distribution in imperfect markets. Examine the determination of rent, wages, interest, and profit from different theoretical perspectives, including Ricardian, Marxian, Kaleckian, and Kaldorian.</p> <p>CO4: Explore welfare economics concepts such as Pigouvian welfare economics, Pareto optimality, social welfare functions, and the theory of second best. Analyze general equilibrium and the compensation principle, as well as the implications of market imperfections and failures on welfare.</p> <p>CO5: Investigate the economics of information, including its role in economic theory and practice, and analyze how information affects economic behavior and decision-making in both closed and open systems.</p>
<p>ECO-422: Macro Economic Theory II</p>	<p>CO1: Understand and apply Post-Keynesian approaches to the demand for money, including the regressive expectation model, portfolio balance approach, Patinkin's real balance effect, Friedman's modern quantity theory, and the shift from Keynesian economics to monetarism.</p> <p>CO2: Analyze macroeconomic theories in an open economy, focusing on income determination, internal and external equilibrium using the Mundell-Fleming model, and the concept of the foreign trade multiplier.</p> <p>CO3: Examine theories of inflation, including Keynesian and Monetarist approaches, the Structuralists' theory, Phillips curve analysis (short-run and long-run), the Natural Rate of Unemployment hypothesis by Samuelson and Solow, Tobin's modified Phillips curve, and the concepts of adaptive and rational expectations.</p>

	<p>CO4: Explore the nature and features of business cycles, and analyze various theories of business cycles including those by Schumpeter, Kaldor, Samuelson and Hicks, and Goodwin. Evaluate the relative efficiency of monetary and fiscal policies in controlling business cycles.</p> <p>CO5: Critically assess the new classical critique of Keynesian micro foundations, including the new classical approach to business cycles and its policy implications, and understand the new Keynesian counter-critique of the new classical perspective.</p>
<p>ECO-423: Quantative Methods</p>	<p>CO1: Understand and apply fundamental concepts of calculus, including functions, limits, continuity, differentiation (rules, partial derivatives, differentials, and higher-order differentials), and integration in the context of economic analysis.</p> <p>CO2: Analyze and solve problems involving maxima and minima of functions, applying simple integration rules, and understand their economic applications.</p> <p>CO3: Utilize difference and differential equations to model and solve economic problems, including both non-linear and linear differential equations, and first and second-order difference equations.</p> <p>CO4: Master matrix algebra concepts, including types of matrices, operations, determinants, solutions of simultaneous equations using Cramer's rule, matrix inversion, rank of a matrix, vector properties, and quadratic forms, including eigenvalues and eigenvectors.</p> <p>CO5: Apply mathematical and statistical techniques using computer software for economic analysis, research, and forecasting, thereby enhancing practical skills in understanding and addressing economic problems.</p>
<p>ECO-424: Indian Economy</p>	<p>CO1: Understand and evaluate various approaches to economic development in India, including self-reliance strategies, import substitution, protectionist policies, and the impact of globalization and structural adjustment packages post-1991. Analyze the role and</p>

	<p>functions of NITI Aayog in the context of economic planning and development.</p> <p>CO2: Analyze poverty, inequality, and unemployment in India by examining poverty measures, government initiatives, and the Global Hunger Index. Evaluate regional imbalances and disparities, employment issues, underemployment, and the strategies for employment generation, focusing on industrial relations, labor welfare, and informal sector employment.</p> <p>CO3: Explore sectoral growth in India with a focus on agriculture, including the impact of economic liberalization. Assess industrial development strategies, including industrial policy reforms, reservation policies for small-scale industries, competition policy, industrial financing sources, public sector reforms, privatization, and Foreign capital involvement. Analyze the growth and significance of the service sector in India, including its output, employment, and export performance.</p> <p>CO4: Examine current economic issues as presented in the latest Economic Survey and Union Budget. Discuss other contemporary issues impacting the Indian economy and their implications, including infrastructure development in key areas such as energy, transport, health, and education.</p> <p>CO5: Apply empirical analysis to understand and address important economic issues in India, integrating insights from sectoral growth, poverty, inequality, and current economic policies into practical understanding and strategic planning.</p>
<p>ECO-425: International Trade and Finance II</p>	<p>CO1: Analyze the foreign exchange market, including demand and supply, exchange rate theories, and the impact of fixed vs. flexible exchange rates.</p> <p>CO2: Examine balance of payments concepts, adjustment processes, devaluation effectiveness, and policies for equilibrium under different exchange rate regimes.</p>

	<p>CO3: Understand international monetary systems, including the Gold Standard, Bretton Woods System, international reserves, and recent global financial crises.</p> <p>CO4: Evaluate India's trade policies, recent trade reforms, international debt issues, and the role of MNCs, as well as export promotion and import/export policies.</p> <p>CO5: Apply theories to assess the impact of policies and external shocks on the economy, focusing on exchange rates, BOP adjustments, and trade policies.</p>
	COURSE OUTCOME FOR III YEAR
	Semester III
<p>ECO-511: Public Economics I</p>	<p>CO1: Understand the role and functions of government, including allocation, distribution, stabilization, and the provision of public, private, and merit goods.</p> <p>CO2: Analyze public expenditure theories, including Wagner's law, the Wiseman-Peacock hypothesis, and reforms such as programme budgeting and zero-based budgeting.</p> <p>CO3: Examine taxation theories, including benefit and ability-to-pay approaches, optimal taxation, incidence theory, excess burden, and the trade-off between equity and efficiency.</p> <p>CO4: Explore public choice theory and budget determination, including voting systems, the Median Voter model, Arrow's Impossibility theorem, and Down's Theory of Democracy.</p> <p>CO5: Investigate politico-economic factors, such as rent-seeking behavior, bureaucratic inefficiencies, and directly unproductive profit-seeking (DUP) activities.</p>
<p>ECO-512: Growth and Development Theory I</p>	<p>CO1: Understand classical and modern theories of development, including contributions from Adam Smith, Ricardo, Malthus, Karl Marx, and Schumpeter.</p> <p>CO2: Analyze various approaches to development, such as the vicious circle of poverty, big push, balanced and unbalanced growth,</p>

	<p>and the critical minimum effort thesis.</p> <p>CO3: Examine growth models, including Harrod-Domar, Solow, and technological progress theories (embodied vs. disembodied, exogenous vs. endogenous).</p> <p>CO4: Explore the A-K Model of Growth, Cambridge criticism of Neo-classical analysis, and Kaldor’s growth model.</p> <p>CO5: Apply theories of growth and development to real-world contexts, including institutional aspects, international trade, investment criteria, social cost-benefit analysis, and the relevance of planning.</p>
<p>ECO-513: Mathematical Economics I</p>	<p>CO1: Understand and apply mathematical techniques to consumer behavior theories, including utility maximization, elasticity, and utility functions.</p> <p>CO2: Analyze production functions and cost functions using mathematical models, including CES, VEX, and trans-log functions, and understand constrained optimization.</p> <p>CO3: Examine price determination and market structures using mathematical models for perfect competition, monopoly, monopolistic competition, duopoly, oligopoly, and monopsony.</p> <p>CO4: Explore market equilibrium concepts, including Marshallian and Walrasian equilibrium, and analyze multi-market and general equilibrium systems.</p> <p>CO5: Integrate mathematical tools with economic theories to refine and enhance understanding of microeconomic concepts.</p>
<p>ECO-513: Agricultural Economics I</p>	<p>CO1: Analyze the role of agriculture in economic development and understand models like Schultz, Lewis, Fei-Ranis, and Jorgenson’s.</p> <p>CO2: Evaluate agricultural production and productivity, including resource use, production functions, cost and supply curves, and technical change.</p> <p>CO3: Examine land reforms and land policy, including land utilization principles, distribution trends, land tenures, and reform measures.</p> <p>CO4: Study the rural labor market, focusing on labor supply, market</p>

	<p>segmentation, marginalization, unemployment trends, and wage differences.</p> <p>CO5: Understand and analyze policy issues relevant to Indian agricultural economics.</p>
<p>ECO-514: Elementary Econometrics</p>	<p>CO1: Understand the scope and fundamentals of econometrics, including the basics of linear regression models and Gauss-Markov theorem.</p> <p>CO2: Apply of regression models (log-linear, semi-log, reciprocal) to economic data.</p> <p>CO3: Identify and address problems in regression analysis such as heteroscedasticity, multicollinearity, and autocorrelation, including their causes, detection, and remedies.</p> <p>CO4: Utilize techniques for regressions with qualitative independent variables and dummy dependent variables, including dummy variable techniques, structural stability tests, and interaction effects.</p> <p>CO5: Implement and analyze models involving qualitative dependent variables, such as Linear Probability Model (LPM), Logit, and Probit models.</p>
<p>ECO-514: Health Economics</p>	<p>CO1: Understand and evaluate key health metrics, including morbidity, mortality, life expectancy, and their relationship with economic development indicators like infant mortality and malnutrition.</p> <p>CO2: Apply economic evaluation methods to healthcare, including cost analysis (CA), cost-benefit analysis (CBA), cost-effectiveness analysis (CEA), and cost-utility analysis (CUA).</p> <p>CO3: Analyze health care markets, including market structures (monopoly, oligopoly), transaction costs, and issues in provider competition, as well as demand and supply-side considerations.</p> <p>CO4: Assess India's health care system, including public and private health systems, financing trends, health sector reforms, and public policies to improve access and manage costs.</p>

	CO5: Evaluate the role of international organizations, such as the WHO, and understand global and national health policies impacting medical care systems.
ECO-515: Financial Institutions and Markets	CO1: Understand the structure and concepts of the financial system, including money, finance, market types, and security valuation. CO2: Analyze the role and efficiency of banks and non-bank financial intermediaries, including development banks, mutual funds, insurance companies, and venture capital funds. CO3: Examine financial markets in India, including money markets, bond markets, stock markets, derivatives, and foreign exchange markets. CO4: Evaluate regulatory frameworks and institutions, focusing on the need for financial regulation, sources of financial instability, and the roles of RBI, SEBI, and IRDA in maintaining stability and development. CO5: Assess the impact of monetary and financial forces on economic development, policy-making, and international finance.
Semester IV	
ECO-521: Public Economics II	CO1: Understand and recall the basic concepts and principles of Public Economics, including public debt, fiscal policy, and fiscal federalism. CO2: Analyze various concepts through case studies, focusing on public debt, fiscal policy, and the principles of fiscal federalism. CO3: Apply knowledge to practical problems related to public finance, including budgetary deficits, fiscal multipliers, and fiscal federalism. CO4: Execute or create projects or field assignments based on the knowledge gained in the course, covering topics such as public debt management, fiscal policy evaluation, and Indian public finances.
ECO-522: Growth and Development	CO1: Understand the sectoral aspects of development, including the role of agriculture, efficiency, sustainability, and industrialization in developing countries.

<p>TheoryII</p>	<p>CO2: Analyze the impact of international trade on economic development, including theories of trade, export-led growth, and international monetary assistance.</p> <p>CO3: Evaluate resource allocation in developing countries, focusing on investment criteria, cost-benefit analysis, and the choice of appropriate technology.</p> <p>CO4: Assess planning and development in India, including the need for planning and an overview of Indian planning models, such as the Mahalanobis Model.</p>
<p>ECO-523: Mathematical Economics II</p>	<p>CO1: Analyze macro-economic models, including income determination in Classical and Keynesian systems, static and dynamic multipliers, investment determinants, and trade cycle models by Samuelson and Hicks.</p> <p>CO2: Understand and apply growth models such as the Harrod Problem, Neoclassical growth model, Solow and Meade models with technical progress, and concepts of optimal growth and the golden rule of accumulation.</p> <p>CO3: Explore game theory concepts including two-person zero-sum games, payoff matrices, pure and mixed strategies, Maximin and Minimax solutions, saddle point solutions, non-constant sum games, prisoners' dilemma, and linear programming techniques like the simplex method.</p> <p>CO4: Utilize linear programming applications and input-output analysis in economics, including transport and storage problems, open and closed systems, Hawkins-Simon conditions, Leontief's dynamic system, and consistency testing of planning models.</p>
<p>ECO-523: Agricultural EconomicsII</p>	<p>CO1: Analyze the role of capital and rural credit, including institutional and non-institutional sources, reorganization through cooperatives, commercial banks, regional rural banks, and the role of NABARD.</p> <p>CO2: Evaluate agricultural prices and marketing policies, including market efficiency, structure, imperfections, regulated markets, crop</p>

	<p>insurance, terms of trade, and the objectives and instruments of agricultural policy, focusing on food security and the Public Distribution System.</p> <p>CO3: Assess trends in agricultural growth in India, including regional variations, shifts in cropping patterns, supply and pricing of inputs, distribution of gains from technological change, and the role of public investment.</p> <p>CO4: Explore the impact of the external sector on Indian agriculture, including international trade, commodity agreements, the WTO, trade liberalization, agro-industries, the role of MNCs, and globalization effects.</p>
<p>ECO-524: Advanced Econometrics</p>	<p>CO1: Understand simultaneous equation models, including structural and reduced forms, simultaneous equation bias, identification rules, and methods such as Indirect Least Squares (ILS), Two-Stage Least Squares (2SLS), Three-Stage Least Squares (3SLS), and Maximum Likelihood Estimation (ML).</p> <p>CO2: Analyze time series models, covering deterministic and stochastic models, tests of stationarity including Autocorrelation Function (ACF) and Correlogram, and Unit Root Tests such as the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests.</p> <p>CO3: Apply forecasting techniques using single equation regression models, ARIMA modeling (Box-Jenkins methodology), Vector Auto-Regression, and multi-variate analysis methods like Discriminant Analysis and Principal Component Analysis.</p> <p>CO4: Explore dynamic econometric models, including autoregressive and distributed lag models, geometric lag approaches (Koyck model, Adaptive expectations), rational expectations, partial adjustment models, and polynomial lag methods (Almon approach).</p>
<p>ECO-524: Economics of Climate Change</p>	<p>CO1: Understand the climate system, its drivers, natural variability, and the economics and ethics of climate change, including ethical frameworks and inter-temporal equity.</p> <p>CO2: Analyze the impacts of climate change on global growth and</p>

	<p>development, including its effects on people, costs in developed countries, economic modeling, societal impacts, and issues like displacement, migration, health, and marginalized groups.</p> <p>CO3: Evaluate optimal climate policies, focusing on economic efficiency, carbon abatement costs, social cost of carbon, discounting, national climate policy tools (carbon tax, cap-and-trade), equity issues, and the environmental Kuznets curve.</p> <p>CO4: Explore climate change concerns specific to India, including the UNFCCC, Kyoto Protocol, impacts on natural resources, coastal vulnerability, rural livelihoods, food security, India's stance in international negotiations, and the National Action Plan on Climate Change.</p>
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