

SUBJECT – ECONOMICS (B.A.)

<p>Programme Outcomes (PO)</p>	<p>Economics is a dynamic and versatile discipline that equips students with the analytical tools and knowledge necessary to understand and address complex economic issues. The program prepares students for a variety of career paths including academia, financial services, policy analysis, and more.</p> <p>PO1: Economics Knowledge and Application Develop a comprehensive understanding of economic theories and principles for professional careers.</p> <p>PO2: Analytical and Quantitative Skills Enhance students' abilities to use quantitative methods and statistical tools for economic analysis.</p> <p>PO3: Environmental Economics and Sustainability Educate students on the economic aspects of environmental issues and sustainable development.</p> <p>PO4: Research and Innovation Foster a research-oriented mindset and encourage innovative thinking in economic studies.</p>
<p>Programme Specific Outcomes (PSO) for Economics (B. A.)</p>	<p>PSO1: Apply advanced practical areas of economics to achieve a professional qualification and real-world expertise.</p> <p>PSO2: Understand basic economic concepts and analyze economic behavior in various practical contexts.</p> <p>PSO3: Develop and apply the economic way of thinking to solve real-world problems and scenarios.</p> <p>PSO4: Communicate complex economic ideas and concepts effectively using appropriate methods and tools.</p> <p>PSO5: Integrate interdisciplinary issues with economic theories to evaluate and understand societal aspects. PSO6: Conduct scientific research in economics by utilizing rigorous methods and developing analytical skills.</p> <p>PSO7: Predict the impact of economic variables on growth and development at national and international levels using quantitative and qualitative methods.</p>

COURSE OUTCOME FOR 1st YEAR	
Semester I	
<p>CORE-1 and GE-III</p> <p>Introductory Micro Economics</p>	<p>CO1: Understand and apply the ten principles of economics to decision-making and economic analysis.</p> <p>CO2: Analyze the market forces of demand and supply, and determine market equilibrium and the effects of shifts in these curves.</p> <p>CO3: Calculate and evaluate the price elasticity of demand and supply, including determinants and computation of income and cross elasticity.</p> <p>CO4: Explain the theory of consumer choice, including budget constraints, preferences, indifference curves, and the derivation of demand curves.</p> <p>CO5: Understand and assess the various cost concepts, measures of cost, and the behavior of cost curves in both short-run and long-run scenarios.</p> <p>CO6: Evaluate the characteristics and outcomes of firms in competitive markets, including profit maximization and supply decisions in short-run and long-run contexts.</p> <p>CO7: Analyze the demand and supply for labor and other factors of production, and determine equilibrium in the labor market, including the interplay between work, leisure, and other factors.</p>
<p>CORE-2:</p> <p>Mathematical Methods in Economics-I</p>	<p>CO1: Understand and apply set theory, Cartesian products, relations, and functions to foundational economic models.</p> <p>CO2: Analyze different types of functions (constant, polynomial, rational, exponential, logarithmic) and interpret their graphs, limits, and continuity.</p> <p>CO3: Evaluate limits and continuity of functions using limit theorems and apply these concepts to mathematical problems in economics.</p>

	<p>CO4: Understand and compute derivatives to determine rates of change, slopes of curves, and apply differentiation rules to economic functions.</p> <p>CO5: Analyze the relationship between total, average, and marginal functions using derivative techniques in economic contexts.</p> <p>CO6: Understand and apply partial differentiation techniques, including geometric interpretations and economic applications such as elasticity.</p> <p>CO7: Understand matrix algebra and determinants, solve systems of equations using Cramer's rule and matrix inversion, and apply these methods to economic models.</p>
Semester II	
<p>CORE-3 and GE-IV</p> <p>Macro Economics</p>	<p>CO1: Differentiate between macroeconomic and microeconomic concepts, and understand the limitations of macroeconomics.</p> <p>CO2: Comprehend and apply the concepts of national income, including GDP, GNP, NDP, NNP, and disposable personal income.</p> <p>CO3: Evaluate output, income, and expenditure approaches to measuring national income and analyze the difficulties in estimating national income.</p> <p>CO4: Illustrate the circular flow of income in 2, 3, and 4-sector economies and assess the relationship between national income and economic welfare, including green accounting.</p> <p>CO5: Understand the evolution and functions of money, analyze the quantity theory of money, and evaluate different approaches to the value of money.</p> <p>CO6: Analyze the causes and effects of inflation and deflation, and evaluate various anti-inflationary and anti-deflationary measures using classical, Keynesian, monetarist, and modern theories.</p> <p>CO7: Examine classical and Keynesian approaches to income determination, apply the principles of aggregate demand and</p>

	supply, and calculate changes in national income using the simple investment multiplier.
CORE-4: Mathematical Methods in Economics-II	<p>CO1: Understand and apply Leontief's open and static input-output model to solve for equilibrium output in a three-industry model.</p> <p>CO2: Compute and interpret second and higher-order derivatives, including curvature, concavity, convexity, and points of inflection of functions.</p> <p>CO3: Apply techniques for finding higher-order partial derivatives and the derivative of implicit functions.</p> <p>CO4: Understand and utilize various integration techniques, including substitution, integration by parts, partial fractions, and interpret definite integrals as area under curves.</p> <p>CO5: Identify and analyze optimum values, relative maxima and minima using first and second derivative tests, and apply these concepts to economic problems.</p> <p>CO6: Apply optimization techniques for multivariable functions, using first and second order conditions, and interpret convex functions and convex sets in economic contexts.</p> <p>CO7: Solve optimization problems with equality constraints using the Lagrange-Multiplier method and analyze the first and second order conditions using the Bordered Hessian determinant.</p>
COURSE OUTCOME FOR II YEAR	
Semester III	
CORE-5: Micro Economics I	<p>CO1: Understand and analyze the axioms of rational choice, preferences, and utility functions to determine consumer behavior.</p> <p>CO2: Apply mathematical tools to maximize utility and make optimal consumption choices in both two-good and multi-good scenarios.</p> <p>CO3: Understand and evaluate the properties of expenditure functions, and apply expenditure minimization principles in consumer theory.</p>

	<p>CO4: Analyze the income and substitution effects on demand functions and construct individual and compensated demand curves.</p> <p>CO5: Understand and analyze production functions, marginal productivity, and the rate of technical substitution, and apply cost minimization principles.</p> <p>CO6: Evaluate cost functions, and distinguish between short-run and long-run cost curves, including shifts in cost curves and cost optimization.</p> <p>CO7: Understand and apply the principles of profit maximization, including marginal revenue and the relationship between average and marginal revenue for price-taking firms.</p>
<p>CORE-6: Macro Economics I</p>	<p>CO1: Understand and analyze the consumption - income relationship, and evaluate the factors influencing consumption functions using various consumption hypotheses.</p> <p>CO2: Identify and explain the determinants of autonomous and induced investment, and apply theories such as the Marginal Efficiency of Capital (MEC) and the Accelerator to investment decisions.</p> <p>CO3: Evaluate classical, neoclassical, and Keynesian approaches to the demand for money, and understand the theory of money supply determination and money multipliers.</p> <p>CO4: Derive and analyze the IS and LM curves, and determine equilibrium levels of employment, output, prices, and investment through their interaction.</p> <p>CO5: Understand the derivation of aggregate demand and aggregate supply curves, and evaluate the impact of changes in IS and LM curves on macroeconomic equilibrium.</p>

	<p>CO6: Analyze the trade-off between inflation and unemployment using the Phillips Curve, and evaluate the implications of adaptive and rational expectations in policy effectiveness.</p> <p>CO7: Understand and critically evaluate various theories of trade cycles, including Hawtrey's Monetary Theory, Hayek's Over-investment Theory, and Keynes' views on trade cycles.</p>
<p>CORE-7: Statistical Methods for Economics</p>	<p>CO1: Understand and apply basic statistical concepts such as population, sample, parameters, and statistics. Collect and present data using various methods, including frequency distributions, graphical, and diagrammatic representations.</p> <p>CO2: Calculate and evaluate measures of central tendency (mean, median, mode, geometric mean, harmonic mean) and dispersion (range, mean deviation, standard deviation, coefficient of variation, quartile deviation), and assess their merits and demerits.</p> <p>CO3: Analyze relationships between variables using correlation methods, including scatter diagrams, Karl Pearson's correlation coefficient, and Spearman's rank correlation coefficient, and interpret their properties and errors.</p> <p>CO4: Apply two-variable linear regression analysis to estimate regression lines and coefficients using the least squares method, and interpret the results and standard error of the estimate.</p> <p>CO5: Understand and apply methods for measuring trends in time series data, including free-hand, semi-average, moving average, and least squares methods, and analyze seasonal components.</p> <p>CO6: Define and calculate various index numbers, including price, quantity, and value relatives, and evaluate methods</p>

	<p>such as Laspeyres' and Fisher's indices. Identify problems and limitations in index number construction and test for ideal index numbers.</p> <p>CO7: Understand and apply basic probability concepts, including addition and multiplication rules and conditional probability. Differentiate between probability and non-probability sampling methods, including simple random, systematic, multi-stage, and quota sampling, and identify sampling and non-sampling errors.</p>
Semester IV	
<p>CORE-8: Micro Economics II</p>	<p>CO1: Analyze market environments and apply concepts of pure competition to firm supply decisions. Calculate and interpret supply functions, producer's surplus, and industry supply curves.</p> <p>CO2: Understand the Edgeworth Box for analyzing trade and Pareto efficiency. Evaluate equilibrium existence and welfare theorems in production contexts.</p> <p>CO3: Identify and analyze barriers to entry and price discrimination under monopoly. Evaluate monopolistic competition, including price-output determination and excess capacity.</p> <p>CO4: Understand and apply Nash equilibrium, mixed strategies, and the Prisoner's Dilemma. Analyze repeated games, cartel enforcement, and sequential games.</p> <p>CO5: Analyze strategies in oligopoly settings, such as quantity and price leadership. Evaluate Cournot equilibrium, collusion, and simultaneous price and quantity setting.</p> <p>CO6: Calculate and interpret producer's surplus and economic rent. Understand their impact on market equilibrium and supply decisions.</p> <p>CO7: Understand the welfare theorems and analyze their implications for production efficiency and market outcomes.</p>

<p>CORE-9: Macro Economics II</p>	<p>CO1: Analyze economic growth models including the Solow Model, Golden rule level of capital, population growth, and technological progress.</p> <p>CO2: Evaluate open economy macroeconomic policies through balance of payments, exchange rate determination, the Mundell- Fleming model, and fiscal and monetary policy effectiveness.</p> <p>CO3: Compare Classical and Keynesian macroeconomic theories focusing on employment and output determination, Say's law, Keynes's General Theory, and the Phillips curve.</p> <p>CO4: Understand the orthodox monetarist school, including the Quantity Theory of Money, the expectations-augmented Phillips curve, and views on stabilization policy.</p> <p>CO5: Explore New Classical Economics, including the influence of Robert E. Lucas Jr., the Rational Expectations hypothesis, and policy implications.</p>
<p>CORE-10: Research methodology</p>	<p>CO1: Understand the meaning, objectives, and significance of research. Identify the qualities of a good researcher and the research process.</p> <p>CO2: Define and select research problems effectively. Apply techniques to clearly outline research problems and design research plans.</p> <p>CO3: Assess measurement scales and sources of error in research. Apply ethical guidelines and understand intellectual property rights in research.</p> <p>CO4: Design and evaluate various research designs, including experimental designs. Understand the features of a good research design.</p> <p>CO5: Develop a research proposal and conduct a literature review. Utilize library and internet resources, and ensure academic integrity.</p>

	CO6: Improve report writing skills, including structure and style. Apply citation styles and evaluate the quality of research reports.
COURSE OUTCOME FOR III YEAR	
Semester -V	
CORE-11 and GE-I Indian Economy I	<p>CO1: Analyze the evolution of the Indian economy from the pre- British period to the present. Evaluate the impacts of colonialism and state policies on economic development.</p> <p>CO2: Examine the relationship between population growth and economic development. Assess demographic issues, including urbanization, migration, and human resource development.</p> <p>CO3: Identify trends in national and per capita income, and analyze sectoral shifts and regional disparities. Evaluate poverty, inequality, and unemployment issues and policies.</p> <p>CO4: Evaluate the rationale, features, and achievements of economic planning in India. Compare different Five Year Plans and understand the transition from planning to NITI.</p> <p>CO5: Analyze the changes in sectoral composition and regional growth disparities. Apply analytical frameworks to understand economic challenges and opportunities.</p> <p>CO6: Review major economic policy debates and paradigm shifts in post-Independence India. Assess the impact of rapid changes on current economic indicators and policies.</p>
CORE-12: Development Economics I	<p>CO1: Define economic development and differentiate it from economic growth. Evaluate characteristics and obstacles of underdeveloped countries, and apply various measures of economic development.</p> <p>CO2: Compare classical, Marxian, Schumpeterian, and Rostow's stages of growth theories. Analyze the Solow model and its implications for convergence with population</p>

	<p>growth and technological progress.</p> <p>CO3: Measure poverty using indices such as Head Count Ratio and FGT Ratio. Assess inequality with Lorenz curves and Kuznets' hypothesis. Evaluate the relationship between growth, poverty, and inequality.</p> <p>CO4: Examine the role of agriculture and industrialization in economic development. Analyze barriers and interdependencies between agriculture and industry, and assess the functioning of markets in agrarian societies.</p> <p>CO5: Identify key characteristics of effective institutions and evaluate their role in economic development. Assess different measures of institutional quality and the impact of democracy on economic progress.</p> <p>CO6: Analyze the impact of governance, property rights, and corruption on economic development. Evaluate market failures and propose solutions for improving market conditions and tackling corruption.</p>
Discipline Specific Elective Paper	
<p>DSE- 1: Public Economics</p>	<p>CO1: Define public finance and compare it with private finance. Explain public versus private goods and maximum social advantage. Discuss market failure and the government's role. Describe types of public budgets and their classifications. Understand balanced vs. unbalanced budgets and their economic implications.</p> <p>CO2: Explain public expenditure, including its classification, principles, and effects. Discuss its growth causes and related theories, such as Wagner's law and the Peacock-Wiseman hypotheses.</p> <p>CO3: Identify sources of public revenue and describe taxation. Discuss tax classification, impact, and incidence. Explain the benefit and ability-to-pay approaches, and analyze trends in tax revenue for central and state</p>

	<p>governments in India.</p> <p>CO4: Discuss sources and effects of public debt. Compare Classical/Ricardian and Keynesian views on debt burden. Explain intergenerational equity and debt management methods. Analyze the trade-off between taxation and debt financing.</p> <p>CO5: Analyze how government policies affect economic efficiency and equity. Evaluate the implications of public finance theories on real-world economic issues. Understand the role of public budgets, expenditure, revenue, and debt in shaping economic policy.</p>
<p>DSE-2: Money Banking and Financial Market</p>	<p>CO1: Define and describe the functions of money. Identify types such as legal tender and bank money. Explain the value of money using index numbers like WPI, CPI, and GDP deflator. Discuss demand and supply of money, including classical, Keynesian, and Friedman's theories.</p> <p>CO2: Understand the roles and functions of commercial banks. Analyze credit creation and limitations. Discuss banking sector reforms in India and lessons from the Global Financial Crisis.</p> <p>CO3: Explain the functions of a central bank. Differentiate between quantitative and qualitative credit control methods. Describe India's current monetary policy, including tools like Repo, reverse repo, and MSF.</p> <p>CO4: Define financial markets and their types. Discuss the roles of money and capital markets. Explain the functions of stock exchanges and SEBI. Analyze the impact of financial markets on economic development.</p>
<p>Semester VI</p>	
<p>CORE-13 and GE-II Indian Economy II</p>	<p>CO1: Assess Indian agriculture's nature and importance. Analyze production trends, land reforms, and the Green Revolution. Evaluate rural credit systems and marketing</p>

	<p>practices.</p> <p>CO2: Examine trends in industrial output and productivity. Discuss industrial policies from 1948 to 1991, including licensing and their impacts. Evaluate issues in small-scale industries, finance, and labor.</p> <p>CO3: Analyze the growth and contribution of the tertiary sector to GDP and employment. Understand human development concepts and their measurement. Evaluate India's foreign trade trends, policies, and foreign capital sources.</p> <p>CO4: Evaluate key environmental policies and acts, such as the Environment Protection Act and National Environmental Policy. Discuss global climate change responses and India's role and impact.</p> <p>CO5: Apply sector-specific knowledge to assess economic indicators. Evaluate empirical evidence and policy debates, considering rapid changes in India.</p> <p>CO6: Integrate insights from different sectors to understand economic trends. Analyze how agricultural, industrial, tertiary, and environmental policies shape economic outcomes.</p>
<p>CORE-14: Development Economics II</p>	<p>CO1: Understand demographic concepts: birth rates, age structure, and fertility. Analyze the Malthusian population trap and household theories. Evaluate the effects of population growth and migration models.</p> <p>CO2: Explore geographic, social, and technological dualism. Discuss Myrdal's theory and regional inequalities. Examine international inequality and the dualistic development thesis.</p> <p>CO3: Analyze the link between development and the environment. Discuss poverty, environmental degradation, and resource management. Understand sustainable development and climate change basics.</p> <p>CO4: Evaluate trade's role in development, focusing on</p>

	<p>export-led growth and the Prebisch-Singer Hypothesis. Compare trade strategies like import substitution vs. export promotion and international agreements.</p> <p>CO5: Examine saving, capital formation, and their impact on development. Discuss the financial sector's role, taxation, public borrowing, inflation, and foreign finance.</p> <p>CO6: Integrate knowledge from population, dualism, environment, and trade. Apply this to evaluate development strategies and policies.</p>
Discipline Specific Elective Paper	
<p>DSE- 3:</p> <p>Environmental Economics</p>	<p>CO1: Explain the scope of environmental economics and its interaction with the economy. Discuss the environment as a public good and identify major environmental problems in developing countries. Analyze global environmental issues and international cooperation for environmental protection.</p> <p>CO2: Understand pollution as an externality and the market approach to optimal pollution. Discuss property rights, Coase theorem, and Pigouvian taxation. Examine climate change, including its causes, effects, and management strategies.</p> <p>CO3: Identify methods for valuing environmental damage and discuss difficulties in valuation. Differentiate between economic value, use value, option value, and existence value. Apply direct and indirect valuation methods such as hedonic pricing, contingent valuation, and travel cost approach.</p> <p>CO4: Classify natural resources as renewable and exhaustible. Discuss the tragedy of the commons and the role of community management in resource conservation. Explain sustainable development concepts, indicators, and sustainability rules.</p> <p>CO5: Analyze real-world environmental issues using economic principles. Evaluate policies and strategies for</p>

	<p>environmental protection and resource management.</p> <p>Apply concepts of environmental valuation and sustainability in practical scenarios.</p>
<p>DSE- 4: Project</p>	<p>CO1: Connect textbook and classroom economics with real-world applications. Provide empirical evidence to understand economics in practical contexts.</p> <p>CO2: Undertake a detailed investigation of a topic chosen by the student. Expose students to the social and real-world applications of classroom concepts with faculty guidance.</p> <p>CO3: Work under a faculty supervisor for topic selection, investigation, and report writing. Receive mentorship throughout the project to ensure thorough exploration and analysis.</p>