

CENTRE FOR DISTANCE AND ONLINE EDUCATION

RAJIV GANDHI UNIVERSITY

ITANAGAR- 791112

M.A ECONOMICS

PROGRAMME PROJECT REPORT (PPR)

1. General Objectives:

Relevance of program to the institutional Mission and Goals:

The post-graduate programme in Economics offered by the Centre for Distance and Online Education (CDOE) is deeply embedded within the foundational mission, vision, and academic goals of Rajiv Gandhi University. While the university aims to achieve excellence by advancing quality education, promoting research, and cultivating multi-skilled global citizens, this specific programme operationalizes those ideals by translating advanced macroeconomic, microeconomic, and econometric frameworks into an accessible, flexible format. It directly addresses the university's mandate to support students from diverse backgrounds by providing a low-cost, high-quality academic alternative for working professionals, remote learners, and socio-economically constrained graduates who were excluded from the regular classroom mode.

Through meticulously structured digital Self-Learning Materials (SLM) and specialized academic counseling, the programme democratizes access to higher education and actively helps improve the national Gross Enrolment Ratio. Furthermore, by training non-traditional learners in empirical data analysis, statistical methodologies, and ethical public policy formulation, the course directly fulfills the university's objective of nurturing intellectual growth, fostering a culture of innovation, and shaping socially responsible, analytical professionals capable of diagnosing structural market failures and contributing meaningfully to local, national, and global development.

Objectives of the programme:

The Post Graduate programme in ECONOMICS aims to fulfill the following goals and educational objectives:

- To provide learning scopes by orienting the students towards study of Economics theory and Policies.

- To develop knowledge of basic concepts and methods of economics, and developing ability to appreciate the challenges in real life.
- To inculcate a strong sense of ethical and moral aptness in general and in the context of learning and its assessment in particular.
- To help shaping the abilities of students for building sincere and responsible professionals and researchers.

2. Programme Outcomes (POs):

The expected outcomes on completion of the post-graduate degree programme in Economics involve academic, behavioural, and social competencies as described below:

- Post-graduates will be capable of demonstrating competence in distilling and employing the core theoretical concepts and foundational terminology of the social sciences across multi-disciplinary and interdisciplinary economic contexts.
- Post-graduates will develop the ability to apply tools of critical thinking and advanced methods of economic enquiry to identify, formulate, analyse, and evaluate complex market and policy issues, arriving at effective solutions derived from first principles.
- Post-graduates will augment their capability to source primary data and utilize quantitative research tools to investigate, analyse, interpret, and synthesize information into sound conclusions, while leveraging the latest technological tools and software to solve practical econometric problems.
- Post-graduates will be capable of taking an informed, action-oriented approach toward India's diverse social, economic, historical, and environmental landscapes, applying their skills to foster just, inclusive, tolerant, and environmentally sustainable communities while actively participating in professional and societal governance.
- Post-graduates will demonstrate the capability to diagnose and solve diverse types of microeconomic and macroeconomic problems in both familiar and unfamiliar contexts, successfully transferring classroom learning to real-life operational scenarios.

- Post-graduates will demonstrate the ability to view complex market problems from multiple perspectives, allowing them to innovate, think laterally, handle non-linear situations without simple solutions, and deploy emotional intelligence and interpersonal skills in unfamiliar professional environments.
- Post-graduates will possess the skills to analytically review research papers, construct logical arguments using precise economic nomenclature, and confidently present complex findings through written and oral media in a manner that remains deeply respectful and sensitive to gender and minority groups.
- Post-graduates will demonstrate the capability to verify the reliability and relevance of empirical evidence, spot logical flaws in opposing economic arguments, synthesize data from varied sources, and draw valid conclusions strongly supported by facts and examples.
- Post-graduates will develop the ability to identify with, respect, and understand the diverse perspectives, emotional contexts, and socio-economic experiences of different stakeholders, demographic groups, or localized communities.
- Post-graduates will demonstrate the capability to outline institutional tasks, set clear directional goals, formulate an inspiring organizational vision, and deploy strategic management skills to motivate, guide, and drive a team toward successful execution.

3. Course wise objectives and outcomes:

MAECO- 401: Micro Economic Theory – I

Objective – The paper deals with the core foundations of modern microeconomic analysis. It aims to acquaint the learners with advanced concepts of consumer behaviour, production systems, and cost dynamics. Additionally, it introduces strategic market structures and game-theoretic tools that are instrumental in understanding how individuals, firms, and organizations make choices in an economy.

Outcome:

- The learners will be able to master the mathematical duality of consumer choice and derive practical market demand functions.
- The learner will be well acquainted with complex production functions, technological progress, and traditional theories of income distribution.
- It enables them to critically evaluate real-world imperfect market structures, including duopoly and collusive cartels.
- It will acquaint the learners with strategic decision-making tools by applying game theory models to competitive market scenarios.

MAECO- 402: Macro Economic Theory – I

Objective – The paper deals with the core aggregative structures of an economy in a lucid style. It aims to acquaint the learners with the foundational classical and Keynesian frameworks of income and employment determination, alongside their modern synthesis through the IS-LM and Mundell-Fleming models. Additionally, it covers advanced foundational theories of consumption, investment, and trade cycles that are instrumental in understanding economic stabilization.

Outcome:

- The learners will be able to distinguish between Classical and Keynesian economic equilibria and evaluate the mechanisms that cause unemployment.

- The learner will be well acquainted with the IS-LM framework to analyze the relative effectiveness of monetary and fiscal policies in both closed and open economies.
- It enables them to critically evaluate long-run consumption behaviors through the lenses of relative, life-cycle, and permanent income hypotheses.
- It will acquaint the learners with investment determinants and dynamic trade cycle models to assess policy tools used for national economic stabilization.

MAECO- 403: Public Finance – I

Objective – The paper deals with the economic rationale and impact of public sector interventions. It aims to acquaint the learners with the foundational principles of government expenditure, major fiscal models, and the core theories of taxation. Additionally, it provides a structured understanding of how state policies address market failures, distribute public goods, and impact production and pricing within an economy.

Outcome:

- The learners will be able to analyze the necessity of government intervention regarding public goods, merit goods, and market externalities.
- The learner will be well acquainted with structural expenditure theories including Wagner's law and the Samuelson and Musgrave budget models.
- It enables them to evaluate the principles, capacity, and equity of taxation systems with an overview of Indian fiscal structures.
- It will acquaint the learners with the economic incidence, elasticity, buoyancy, and direct effects of taxation on market prices and work effort.

MAECO- 404: Mathematics

Objective – The paper deals with the core mathematical tools required for advanced economic analysis. It aims to acquaint the learners with coordinate geometry, matrix algebra, differential and integral calculus, and linear programming techniques. Additionally, it provides a structured analytical framework that is instrumental in modeling consumer equilibrium, optimizing firm production, and solving complex economic systems.

Outcome:

- The learners will be able to apply coordinate geometry and algebraic series to represent linear and non-linear economic trends.
- The learner will be well acquainted with matrix inversion, Cramer's rule, and vector spaces to solve multi-variable simultaneous economic equations.
- It enables them to utilize total, partial, and constrained differentiation to analyze demand elasticity and optimize consumer and firm behavior.
- It will acquaint the learners with calculus integration and linear programming models to estimate market surpluses, evaluate costs, and solve primal-dual allocation problems.

MAECO- 405: Micro Economic Theory – II

Objective – The paper deals with advanced microeconomic frameworks beyond traditional market models. It aims to acquaint the learners with alternative managerial theories of the firm, the mechanics of general equilibrium systems, and the foundations of modern welfare economics. Additionally, it addresses how economic agents make decisions under conditions of risk, uncertainty, and asymmetric information, which is instrumental in analyzing modern market failures.

Outcome:

- The learners will be able to critically evaluate non-profit maximizing goals of modern corporations using Baumol's, Marris's, and Williamson's managerial models.
- The learner will be well acquainted with the existence and stability conditions of Walrasian general equilibrium and computable general equilibrium systems.
- It enables them to apply Pareto optimality conditions and compensation criteria to assess social welfare policies and understand Arrow's Impossibility Theorem.
- It will acquaint the learners with behavioral responses to risk and uncertainty alongside market solutions for moral hazard and asymmetric information.

MAECO- 406: Monetary Economics

Objective – The paper deals with the microeconomic foundations of monetary theory,

financial markets, and asset pricing dynamics. It aims to acquaint the learners with advanced theories of the demand and supply of money, inflationary expectations, and macro-financial paradigms like Monetarism and New-Classical economics. Additionally, it addresses the structural mechanics of capital markets, derivatives pricing, and the functional role of Indian financial institutions in economic development.

Outcome:

- The learners will be able to distinguish between exogenous and endogenous money supply dynamics and analyze portfolio choice and monetary demand theories.
- The learner will be well acquainted with adaptive and rational expectations alongside the policy trade-offs presented by the micro-founded Phillips Curve.
- It enables them to compute portfolio risk diversification metrics and apply the Modigliani-Miller theorem, CAPM, and arbitrage asset pricing models.
- It will acquaint the learners with the construction of market indices, the valuation of financial derivatives, and the regulatory operations of SEBI, commercial banks, and micro-finance networks.

MAECO- 407: Public Finance – II

Objective – The paper deals with advanced budgetary, debt, and macroeconomic dimensions of fiscal policy. It aims to acquaint the learners with budgeting techniques, deficit metrics, public debt dynamics, and the operational mechanics of fiscal policy in both closed and open economies. Additionally, it addresses structural frameworks of fiscal federalism and the institutional resource transfer mechanisms within the Indian economy.

Outcome:

- The learners will be able to distinguish between incremental and zero-base budgeting while analyzing primary, revenue, and fiscal deficits in the Indian context.
- The learner will be well acquainted with public debt management, sources of government borrowing, Ricardian equivalence, and Domar's debt stability model.
- It enables them to evaluate anti-cyclical fiscal instruments, crowding-out effects, and the tri-policy interaction of fiscal, monetary, and exchange rate variables.
- It will acquaint the learners with horizontal and vertical fiscal imbalances alongside the resource allocation roles played by the Finance Commission.

MAECO- 408: Statistics

Objective – The paper deals with the core statistical and probabilistic methods required for quantitative economic analysis. It aims to acquaint the learners with probability theory, mathematical distributions, statistical inference, and multi-variable regression modeling. Additionally, it provides a structured framework for data analysis through index numbers and time series estimation, which is instrumental in measuring economic variables and testing empirical hypotheses.

Outcome:

- The learners will be able to apply fundamental probability theorems, conditional probability, and Bayes' theorem to model uncertain economic events.
- The learner will be well acquainted with discrete and continuous probability distributions, moment generating functions, and standard normal curve applications.
- It enables them to conduct hypothesis testing, manage Type I and Type II errors, and draw statistical inferences using various distributions methods.
- It will acquaint the learners with Ordinary Least Squares (OLS) regression assumptions, multiple correlation metrics, index number formatting, and linear time-series trend forecasting.

MAECO- 501: Development Economics – I

Objective – The paper deals with the core concepts, historical theories, and structural models of economic growth and development. It aims to acquaint the learners with the metrics of developmental progress, standard theories of persistent underdevelopment, and foundational classical and Marxian growth frameworks. Additionally, it provides a comprehensive breakdown of neo-classical, Cambridge, and technical progress formulations that are instrumental in understanding long-run economic dynamics.

Outcome:

- The learners will be able to distinguish between growth and development metrics, evaluate the Human Development Index, and assess Kuznets' properties of structural growth.
- The learner will be well acquainted with systemic traps of underdevelopment including Leibenstein's critical minimum effort, Nelson's trap, and Myrdal's cumulative causation.

- It enables them to critically compare classical, Schumpeterian, and Marxian growth mechanics alongside unstable Harrod-Domar and steady-state Solow models.
- It will acquaint the learners with classifications of technological progress, vintage capital conditions, and the conceptual evolution toward modern endogenous growth theory.

MAECO- 502: International Economics – I

Objective – The paper deals with the classical and modern theories of international trade and commercial policy. It aims to acquaint the learners with comparative and opportunity cost frameworks, factor endowment paradigms, and the determination of terms of trade. Additionally, it addresses the partial and general equilibrium impacts of tariffs, along with the dynamic relationships between factor growth, technical progress, and international trade.

Outcome:

- The learners will be able to evaluate trade configurations using Ricardian comparative advantage, Haberler’s opportunity cost, and varying cost production possibility frontiers.
- The learner will be well acquainted with the Heckscher-Ohlin theorem, the Leontief Paradox, and factor-price equalization mechanics under varying market forms.
- It enables them to compute multiple indices for the terms of trade and mathematically derive trade equilibrium using reciprocal demand offer curves.
- It will acquaint the learners with the income distribution effects of tariffs, the structural implications of the Rybczynski theorem, and the conditions leading to immiserising growth.

MAECO- 503: Indian Economics

Objective – The paper deals with the structural changes, sectoral trends, and policy frameworks of the Indian economy. It aims to acquaint the learners with national income dynamics, institutional shifts in agriculture and industry, and the development of physical and social infrastructure. Additionally, it addresses the evolution of public finance, deficit behaviors, and the macroeconomic impact of post-1991 economic reforms and globalization on domestic growth.

Outcome:

- The learners will be able to analyze historical trends in national income, employment patterns, inflation causes, and contemporary labor market reforms in India.

- The learner will be well acquainted with agricultural productivity growth, industrial policy evolutions (1948 and 1956), and the ongoing public sector disinvestment debate.
- It enables them to evaluate financing policies for physical infrastructure, social infrastructure (education and healthcare), and localized market institutions.
- It will acquaint the learners with central-state taxation patterns, structural adjustment programs, WTO implications, and the role of foreign direct investments.

MAECO- 504: Environment and Population Economics

Objective – The paper deals with the economic interlinkages between environment, development, and demographic change. It aims to acquaint the learners with the foundational principles of environmental externalities, valuation methodologies, and sustainable development frameworks. Additionally, it provides a structured analytical understanding of demographic parameters, constructing life tables, and evaluating classical and modern economic theories of fertility and mortality.

Outcome:

- The learners will be able to analyze environmental degradation as a market failure and evaluate property-right solutions through the Coase theorem and the Tragedy of the Commons.
- The learner will be well acquainted with direct and indirect environmental valuation techniques including contingent valuation, hedonic pricing, and travel cost methods.
- It enables them to evaluate the environment-development trade-off using the Environmental Kuznets Curve, green accounting indicators, and sustainable growth metrics.
- It will acquaint the learners with the algebraic formulation of crucial demographic markers, Becker and Easterlin fertility models, and the structural construction of life tables.

MAECO- 505: Development Economics – II

Objective – The paper deals with advanced strategic paradigms, resource allocation criteria, and planning methodologies in development economics. It aims to acquaint the learners with classical big-push and dual-economy frameworks, human and social capital formation, and the operational mechanics of project cost-benefit evaluations. Additionally, it

addresses structural planning designs, input-output models, and the political economy of international trade and institutional quality.

Outcome:

- The learners will be able to analyze strategic pathways to industrialization through a comparison of balanced growth, unbalanced growth, and Ranis-Fei structural frameworks.
- The learner will be well acquainted with human and social capital dynamics, community-led growth structures, and project appraisal techniques using Little-Mirrlees parameters.
- It enables them to utilize mathematical planning models including Hawkins-Simons matrix conditions, open-closed input-output systems, and the Mahalanobis development plan.
- It will acquaint the learners with trade policy choices between import substitution and export promotion, alongside Krueger's rent-seeking indicators and foreign aid impacts.

MAECO- 506: International Economics – II

Objective – The paper deals with the open-economy macroeconomic dimensions of international trade and monetary systems. It aims to acquaint the learners with balance of payments adjustment mechanisms, foreign exchange determination theories, and the economics of regional trade integration. Additionally, it addresses the evolution of global monetary institutions and the strategic policy design required to balance internal and external economic goals.

Outcome:

- The learners will be able to evaluate balance of payments adjustment strategies using structural absorption and monetary frameworks.
- The learner will be well acquainted with foreign exchange market operations, purchasing power parity, interest rate parity, and currency hedging techniques.
- It enables them to analyze regional integration processes through the distinct economic impacts of trade creation and trade diversion.
- It will acquaint the learners with the institutional history from the Gold Standard to the WTO, along with policy modeling using Swan diagrams and Tinbergen rules.

MAECO- 507: North-East Economics

Objective – The paper deals with the structural, demographic, and sectoral dynamics of the North-Eastern regional economy of India, with a dedicated focus on Arunachal Pradesh. It aims to acquaint the learners with regional income trends, natural resource allocations, workforce dynamics, and specific agricultural practices like shifting cultivation. Additionally, it addresses infrastructural constraints, industrial growth patterns, fiscal dependencies, and the modern policy impacts of economic liberalization and the Look East framework.

Outcome:

- The learners will be able to evaluate the structural composition of the Net State Domestic Product (NSDP) and assess the human development status of North-East India.
- The learner will be well acquainted with demographic transitions, urbanization patterns, gendered workforce participation, and unemployment trends across the region.
- It enables them to critically assess shifting versus permanent cultivation methods, land use patterns, and the socio-economic need for land reforms in Arunachal Pradesh.
- It will acquaint the learners with the promotional roles of regional financial institutions like NEDFi, state public finance indicators, and the geopolitical trade prospects of the Look East Policy.

MAECO- 508: Agricultural Economics

Objective – The paper deals with the economic logic, behavioral modeling, and institutional structures governing the agricultural sector. It aims to acquaint the learners with agriculture-industry interdependencies, risk management in farm production, and classical household and tenancy models. Additionally, it addresses rural credit market imperfections, technological diffusion barriers, and contemporary issues surrounding food security, price stabilization, and international trade regimes.

Outcome:

- The learners will be able to analyze economic links between agriculture and industry, measure farm management efficiency, and evaluate environmental outcomes.

- The learner will be well acquainted with mathematical production functions, price behavior under the Cobweb theorem, and Nerlovian supply response frameworks.
- It enables them to evaluate structural labor surplus dynamics using Lewis, Jorgenson, and Boserup paradigms alongside microeconomic farm household models.
- It will acquaint the learners with rural tenancy systems via Marshall-Cheung models, capital access limits, the Indian mode-of-production debate, and WTO agricultural compliance.

4. Nature of prospective target group of learners:

The distance education programme in Economics caters to a highly diverse group of learners who require a flexible academic format. It serves working professionals, such as corporate employees, banking staff, school teachers, NGO workers, and defense or police personnel, who cannot attend regular classes due to rigid shifts or remote postings but need this degree to secure promotions or master data handling for their tasks. Additionally, it provides a low-cost, flexible option for dropouts and remote learners who had to stop their education due to financial crises, marriage, family responsibilities, or geographical isolation. The programme also directly benefits competitive exam aspirants preparing for civil services, banking, or teaching tests like the UPSC, GPSC, or NET/SET, as distance learning eliminates travel time and maximizes self-study hours. Furthermore, it addresses unemployed or underemployed youth who want to boost their job market value by acquiring in-demand technical skills like data interpretation, statistical tools, and market analysis. Finally, it welcomes lifelong learners, including retired individuals, social activists, and professionals from fields like law or engineering, who are driven purely by intellectual curiosity to understand how markets, inflation, trade, and economic policies govern society.

5. Appropriateness of Open and Distance learning mode for acquiring specific competence and Skills:

The Open and Distance Learning (ODL) mode serves as an ideal and highly effective institutional mechanism for equipping learners with advanced economic competencies and practical analytical skills to navigate modern structural challenges. In a dynamic global economy, understanding core concepts like optimizing scarce resource allocation,

managing inflationary trends of essential commodities, decoding international trade interdependencies, evaluating spatial price discrimination, and diagnosing systemic socio-economic inequality requires a robust blend of theoretical and empirical training. This postgraduate curriculum in Economics is specifically engineered to demystify these complex phenomena by providing an inclusive, high-quality educational framework for motivated learners unable to access the regular classroom mode. By integrating structured pedagogy—including expert academic counseling, specialized Self-Learning Materials (SLM), dedicated advisory support, and rigorous continuous assessment—the ODL framework successfully cultivates critical problem-solving capabilities, quantitative data literacy, and public policy formulation skills, making it the most appropriate and inclusive pathway for achieving comprehensive mastery of the discipline.

6. Instructional Design:

Duration: The course is of two-year duration with four semesters in any case the course is to be completed within four years.

Faculty and support staff requirements: In order to run the contact and counselling programme effectively, there are full time working counselling coordinators for the course. The counselling coordinators do the necessary coordination for involving resource person in the programme and assignment evaluation. The learners can also contact them for clarifying their difficulties.

Instructional delivery mechanism:

Identification of media and students support service system:

Procedure for admission: Prospectus with admission form is available at CDOE, RGU and its respective study centers. The students during the admission should submit their original registration card and migration certificate with all the other required documents mentioned in the prospectus within a specific period.

Curriculum transaction and evaluation: The course curriculum involves contact and counselling programme at the institution. The learners are given assignment which is compulsory. The learner will have to submit the assignment in order to be eligible for appearing the final examination. The examination will be conducted semester wise. The assignment will carry 30% and the written examination will carry 70%. Evaluation of the

assignment will be done at respective study center (if resource persons are available) of CDOE, RGU. The evaluators of the assignment will give their feedback on the quality and further scope for improvement of performance of the examine.

Laboratory support required for the programme: Laboratory support is required for papers like educational psychology. In educational psychology paper, the practical papers are conducted by the regular education department with the coordination of CDOE, RGU.

Library resources: There is provision for the institutional library of CDOE which functions within CDOE building. Besides the institutional library, learners can also visit the central library of the University next to the CDOE building.

7. Financial involvements:

Cost of estimate of the programme and the provisions therefore: common annual budget is sanctioned every year for the current financial year for expenses against all courses. This allocation is allocated in following heads

- Development of course material
- Student support services
- Self-training and development
- Technology support
- Library
- Research and Development

8. Amount assigned for programme development, delivery and maintenance as shown below

Details	MA 1st Semester	MA 2ndSemester	MA 3rdSemester	MA 4thSemester
Course Fee	₹ 700.00	₹ 700.00	₹ 700.00	₹ 700.00
Admission Fee	₹ 500.00	₹ 500.00	₹ 500.00	₹ 500.00
Registration Fee	₹ 450.00			
Central Examination Fee	₹ 1,600.00	₹ 1,600.00	₹ 1,600.00	₹ 1,600.00
Marksheet Fee	₹ 250.00	₹ 250.00	₹ 250.00	₹ 250.00
Self Learning Material	₹ 3,500.00		₹ 3,500.00	
Assignment EvaluationFee	₹ 300.00	₹ 300.00	₹ 300.00	₹ 300.00
Counselling Fee	₹ 700.00	₹ 700.00	₹ 700.00	₹ 700.00
Identity Card Fee	₹ 100.00	₹ 100.00	₹ 100.00	₹ 100.00
Continuation Fee		₹ 500.00	₹ 500.00	₹ 500.00
Assignment ResponseFee	₹ 250.00	₹ 250.00	₹ 250.00	₹ 250.00
Centre Fee	₹ 300.00	₹ 300.00	₹ 300.00	₹ 300.00
Library Fee	₹ 100.00	₹ 100.00	₹ 100.00	₹ 100.00
	₹ 8,750.00	₹ 5,300.00	₹ 8,800.00	₹ 5,300.00

9. Quality assurance mechanism:

To ensure academic excellence, institutional credibility, and the robust delivery of advanced economic competencies, the university implements a comprehensive Quality Assurance Mechanism managed by the Internal Quality Assurance Cell (IQAC) and the Center for Internal Quality Assurance (CIQA). This mechanism guarantees that the ODL programme maintains the same rigorous standards as the regular formal education system through the

following structured processes:

- The postgraduate economics curriculum is designed, monitored, and periodically updated by a Board of Studies consisting of senior economists, econometricians, and industry experts. This ensures that the syllabus remains aligned with contemporary global economic trends, civil services exam structures, and local labor market demands.
- All study materials are developed by subject matter experts and undergo a strict three-tier review process (content vetting, language editing, and distance-education formatting). The materials are audited to ensure they simplify complex mathematical economics, statistical operations, and policy frameworks for independent learners.
- The university conducts periodic audits of Study Centres and Regional Centres. Attendance, the quality of academic counseling sessions, and the timely resolution of student queries regarding statistical tools or data interpretation are closely monitored to maintain high instructional standards.
- To maintain evaluation integrity, the university enforces a dual-assessment strategy. Continuous internal assessments (assignments, case studies, and projects) are rigorously cross-checked, and proctored term-end examinations are conducted securely to validate the analytical and problem-solving skills acquired by the learners.
- A formal feedback loop systematically collects data from students, academic counselors, and alumni. This data is statistically analyzed to evaluate course delivery, identify learning barriers, and implement immediate corrective actions, ensuring the programme continuously adapts to the changing socio-economic profile of its learners.

10.Expected programme outcome:

The post-graduate degree programme equips students with advanced academic and social competencies, enabling them to master core economic theories, principles, and quantitative methodologies in frontier research areas while demonstrating deep theoretical understanding and methodical rigor. Graduates develop the critical capacity to execute data-driven, in-depth analyses of complex macroeconomic and microeconomic policy issues, evaluating socioeconomic challenges through modern empirical tools and qualitative frameworks. Additionally, the curriculum fosters practical and professional alignment by enhancing entrepreneurial capacity, business acumen, and specialized knowledge through a diverse selection of optional courses, ultimately preparing students to contribute effectively to global and local economic development.

a. Curriculum and Detail syllabai of the programme

SYLLABUS

FOR MASTER OF ARTS IN ECONOMICS (DISTANCE EDUCATION)



RAJIV GANDHI UNIVERSITY RONO HILLS, DOIMUKH ARUNACHAL PRADESH

MASTER OF ARTS IN ECONOMICS

COURSE TITLE: M.A. ECONOMICS

FIRST SEMESTER

Paper Code	Course Title	Marks		
		End Term	Assignment	Total
MAECO-401	Micro Economic Theory –I	70	30	100
MAECO-402	Macro-Economic Theory	70	30	100
MAECO-403	Public Finance –I	70	30	100
MAECO-404	Mathematics	70	30	100

SECOND SEMESTER

Paper Code	Course Title	Marks		
		End Term	Assignment	Total
MAECO-405	Micro Economic Theory-II	70	30	100
MAECO-406	Monetary Economics	70	30	100
MAECO-407	Public Finance –II	70	30	100
MAECO-408	Statistics	70	30	100

THIRD SEMESTER

Paper Code	Course Title	Marks		
		End Term	Assignment	Total
MAECO-501	Development Economics –I	70	30	100
MAECO-502	International Economics –I	70	30	100
MAECO-503	Indian Economics	70	30	100
MAECO-504	Environment and Population Economics	70	30	100

FORTH SEMESTER

Paper Code	Course Title	Marks		
		End Term	Assignment	Total
MAECO-505	Development Economics –II	70	30	100
MAECO-506	International Economics –II	70	30	100
MAECO-507	North-East Economics	70	30	100
MAECO-508	Agricultural Economics	70	30	100

The Institute of Distance Education provides counseling classes of 8 hours a day to the learners. In a year total 1600 hours of counseling classes are being provided to the learners.

MAECO - 401

MICRO ECONOMIC THEORY –I

UNIT I : Consumer's Choice under Certainty

Preference ordering and utility function - Utility maximization and Marshallian demand function - Indirect utility function and cost/expenditure function duality between constrained utility maximization and constrained cost minimisation -Hicksian demand function - Properties of budget line and demand function: Engel aggregation, Cournot aggregation, homogeneity -Linear expenditure system - An overview of estimation of demand functions.

UNIT II: Theory of Production

Production function - Returns to scale and returns to a factor - Elasticity of factor substitution - Types of production function: Homogeneous production function, Cobb-Douglas, CES production functions and its properties - Derivation of Cobb-Douglas and Leontief production functions from CES production function.

UNIT III: Theory of Cost and Factor Pricing

Derivation of cost function from production function - Technical progress (Hicksian and Harrodian version) and factor shares - Theories of distribution: Marginal productivity theory and Euler's theorem, Ricardo, Kalecki and Kaldor.

UNIT IV: Theory of Market

Critique of perfect competition as a market form - Actual market forms: Duopoly, oligopoly and monopolistic competition - Cournot and Staekelberg's model of duopoly - Collusive oligopoly: Cartel.

UNIT V: Game Theoretic Approach to Economics

Two-person zero-sum and non-zero sum game - Pure strategy, maximin and minimax-saddle point, and minimax theorem - mixed strategy, its solution', Two person co-operative

game, non-co-operative game - dominated strategy - Prisoner's dilemma and its repetition- Nash equilibrium- application of game theory to oligopoly.

Recommended Readings:

1. Koutsoyiannis, A., *Modern Microeconomics*, Macmillan Press, London, 1979.
2. Walter Nicholson and Christopher Snyder (2008) *Microeconomic Theory: Basic Principles and Extensions*, Thomson South-Western.
3. Varian, H., *Microeconomic Analysis*, W.W. Norton, New York, 2000.
4. Baumol, W. J., *Economic Theory and Operations Analysis*, Prentice Halls of India, New Delhi, 1982.
5. Henderson, J.M. and R.E. Quant, *Microeconomic Theory: A Mathematical Approach*, McGraw Hill, New Delhi, 1980.
6. Kreps, M.D., *A Course in Microeconomic Theory*, Prentice Hall of India, New Delhi, 1992.
7. Arrow, K., *Social Choice and Individual Values*.
8. Sen, A.K., *Collective Choice and Social Welfare*.
9. Ray, N.C., *An Introduction to Microeconomic Theory*.
10. Mishan E.J., *Welfare Economics: An Assessment*, North Holland, Amsterdam, 196

MAECO - 402

MACRO ECONOMIC THEORY –I

UNIT I: Review of Classical and Keynesian Economics

Classical theory of income, employment, wage rate and price level -macro equilibrium in classical model - Classical dichotomy - Causes of unemployment - Evaluation of classical model.

Keynesian determination of income, output and employment - Consumption function, investment multiplier and balanced budget multiplier - Multiplier in an open economy; difference between Keynesian and classical macro-equilibrium, Pigou's critique of Keynes's under employment equilibrium - the Pigou effect.

UNIT II: Neo-Classical and Keynesian Synthesis

Classical and Keynesian theories of interest - IS-LM model - Relative effectiveness of monetary and fiscal policies - Extension of IS-LM model to labour market, flexible price; Mundell-Fleming model of an open economy.

UNIT III: Theories of Consumption

Extension of Keynesian consumption function to long run - Relative Income Hypothesis- Life Cycle Hypothesis - Permanent Income Hypothesis.

UNIT IV: Theories of Investment

Investment demand: Present value criterion for investment, payback period and internal rate of return;' Marginal Efficiency of Investment (MEI). Acceleration principle, its derivation from the profit maximizing behaviour, flexible accelerator

UNIT V: Theories of Trade Cycle

Schumpeterian theory - Multiplier-Accelerator interaction - Kaldor's theory - Monetary &

fiscal policy for economic stabilization.

Recommended Readings:

1. Mankin, N. Gregory (2010) *Macroeconomics*, Worth Publishers, New York.
2. Shapiro, Edward, *Macroeconomic Analysis*, Galgatia Publication, New Delhi, 1996.
3. Branson, W. H., *Macroeconomic Theory and Policy*, Universal Book Stall, New Delhi, 1979.
4. Kaldor, N., *Essays on Economic Stability and Growth*, Duckworth, London.
5. Jha, R., *Contemporary Macroeconomic Theory and Policy*, New Age International (P) Ltd., New Delhi, 1999.
6. Mueller, M.G. (ed.), *Readings in Macroeconomics*, Surjeet Publications, Delhi, 1978.
7. Gampinski, J. H., *Macroeconomic Theory*, McGraw Hill, New York, 1982.
8. Keynes, J. M., *General Theory of Employment, Interest and Money*, Macmillan, London, 1936

MAECO -403 PUBLIC FINANCE –I

UNIT - I: Rationale for Government Intervention

Role of Government in economic activity: Allocation, distribution and stabilization functions
- Provision of public goods and merit goods - Externalities, market imperfection and government intervention.

UNIT - II: Size of Government Expenditure

The classical and neoclassical views on the size of the government and its expenditure;
Wagner's law of increasing state activities, Keynesian view; effects of public expenditure.

UNIT - III: Major theories of Public expenditure

- Voluntary exchange principle and Lindhal's model - Samuelson's model - Musgrave's optimum budget model- Paradox of voting.

UNIT - IV: Principles of taxation

Canons of taxation, benefit & ability to pay approaches, neutrality in taxation; taxable capacity, absolute and relative; factors determining taxable capacity; regressive, proportional and progressive tax; overview of Indian Tax System.

UNIT - V: Effects of taxation

Tax on income and its effect on work effort, commodity tax: unit and ad valorem; impact and incidence; effects of tax on production and price in different market conditions; elasticity and buoyancy of tax.

Recommended Readings:

Musgrave, R. A., *The Theory of Public Finance*, McGraw Hill, Kogakhusa, Tokyo, 1959.

Musgrave, R. A. and P. B. Musgrave, *Public Finance in Theory and Practice*, McGraw Hills, Kogakhusa, Tokyo.

Buchanan, J. M., *The Public Finances*, Richard D Irwin, Homewood, 1970. Jha, R., *Public Economics*, Routledge, London, 1998.

Atkinson, A.B.,and J. E. Stiglitz, *Lectures on Public Economics*, Tata McGraw Hill, Newyork, 1980.

Peacock, A. and C. K. Shaw, *The Economic Theory of Fiscal Policy*, George Allen and Unwin, London, 1978.

Buchanan, J. M., *Public Principles of Public Debt - A Defence and Restatement*, Richard Irwin, Homewood, 1958.

Musgrave, R. A. and C. Shoup (Eds.), *Readings in the Economics of Taxation*, George Allen and Unwin, London, 1970.

Chelliah, Raja J. et al, *Trends and Issues in India's Federal Finances*, National Institute of Public Finance and Policy, New Delhi, 1981.

Rao, Govinda *Political Economy of Federalism in India* - Oxford University Press.

Rao, Govinda, State Finances in India Issues and Challenges (Article) *Economic and Political Weekly* - 03-08- 2002.

MAECO -404 MATHEMATICS

UNIT I: Co-ordinate Geometry (Two dimensional) and Algebra

Equation of the straight line: Slope, intercept - Derivation of a straight line given (a) intercept and slope and (b) intercepts - angle between two lines -condition of lines for being parallel. Circle: Derivation of the equation of a circle given a point & radius - derivation of the equation of a parabola - definition of hyperbola and ellipse - binomial expansion for a positive, negative or fractional exponent - exponential and logarithmic series.

UNIT II: Matrix Algebra

Scalar and vector - length of a vector - addition, subtraction and scalar products of vectors - angle between two vectors - Cauchy-Schwarz inequality - vector space and normed space -basis of a vector space, the standard basis - spanning of vector space: Linear combination and linear independence.

Types of Matrices: Null, unit and idempotent matrices - Matrix operations - Determinants - Matrix inversion and solution of simultaneous equations - Cramer's rule - Rank of a matrix- Characteristic roots and vectors.

UNIT III: Differentiation

Limit and continuity of functions - Basic rules of differentiation - Partial and total differentiation

-Indeterminate form - L'Hopital Rules - Maxima and minima - Points of inflexion - constrained maximization and minimization - Lagrangean multiplier Applications to elasticity of demand and supply, equilibrium of consumer and firm.

UNIT IV: Integration

Integral as anti-derivative - Basic rules of integration - Indefinite and definite integral- Beta and Gamma functions - Improper integral of the form $\int_a^{\infty} e^{-x^2} dx$; Applications to derivation of total revenue and total cost from marginal revenue and marginal cost, estimation of

consumer surplus and producer surplus - First order differential equation.

UNIT V: Linear Programming

Concept, objectives and uses of linear programming in economics - Graphical method - Slack and surplus variables - Feasible region and basic solution, problem of degeneration - Simplex method - Solution of primal and dual models.

Recommended Readings:

Allen, R.G.D., *Mathematical Analysis for Economists*, Macmillan, 1976.

Chiang, A.C., *Fundamental Methods of Mathematical Economics*, McGraw Hill, Kogakusha, New Delhi, 1974.

Yamane, T., *Mathematics for Economists*, Prentice Halls, New Delhi, Indian Reprint, 1986.

Baumol, W.J., *Economic Theory and Operations Analysis*, Prentice Hall, Indian Reprint 1986. Hadley, G, *Linear Algebra*, Addison-Weley Publishers Company, Tokyo.

Vatssa, B.S., *Theory of Matrices*, Wily Eastern Limited, New Delhi, Reprint, 1995.

MAECO -405

MICRO ECONOMIC THEORY-II

UNIT I: Alternative Theories of the Firm

The traditional theory of firm and its critical evaluation - Baumol's revenue maximization model

- Williamson's model of managerial discretion - Managerial firm vs. entrepreneurial firm
- Marris's model of managerial enterprise - Limit pricing theory.

UNIT II: Theory of General Equilibrium

Principles of general equilibrium, existence, uniqueness and stability (Walrasian and Marshallian conditions of stability) - Walrasian general equilibrium system - Computable general equilibrium

UNIT III: Welfare Economics

Pareto Optimality, Pareto Optimality conditions: Consumption, production and exchange, critical evaluation of Pareto Optimality - Compensation tests: Kaldor, Hicks and Scitovsky and Little's criterion - Social welfare function - Arrow's Impossibility Theorem.

UNIT IV: Choice under Uncertainty and Risk

Difference between Uncertainty and risk; classes of measures: associative measure, ordinal and cardinal measures, Axioms of Neumann-Morgenstern (N-M) utility, Characteristics of N-M utility index; relationship between the shape of the utility function and behavior towards risk, elasticity of marginal utility and risk aversion; absolute and relative risk aversion.

UNIT V: Economics of Imperfect Information

Information and decision making under certainty and uncertainty - Asymmetric information, adverse selection, moral hazard and signaling - Applications to insurance and lemons markets

Recommended Readings:

Koutsoyiannis, A., *Modern Microeconomics*, Macmillan Press, London, 1979.

Walter Nicholson and Christopher Snyder (2008) *Microeconomic Theory: Basic Principles and Extensions*, Thomson South-Western.

Varian, H., *Microeconomic Analysis*, W.W. Norton, New York, 2000.

Baumol, W. J., *Economic Theory and Operations Analysis*, Prentice Halls of India, New Delhi, 1982.

Henderson, J.M. and R.E. Quant, *Microeconomic Theory: A Mathematical Approach*, McGraw Hill, New Delhi, 1980.

Kreps, M.D., *A Course in Microeconomic Theory*, Prentice Hall of India, New Delhi, 1992.

Arrow, K., *Social Choice and Individual Values*.

Sen, A.K., *Collective Choice and Social Welfare*. Ray, N.C., *An Introduction to Microeconomic Theory*.

Mishan E.J., *Welfare Economics: An Assessment*, North Holland, Amsterdam, 1969.

Sen, Anindya, *Microeconomics, Theory and Applications*, Oxford University Press, 1999.

Maddala, G.S. and Ellen Miller, *Microeconomics-Theory and Applications*; Tata McGraw-Hill Publishing Company Limited, New Delhi, 2004.

Borch, K.H., *The Economics of Uncertainty*, Princeton University Press, Princeton, 1968.

Diamond and Rothschild (Eds.), *Uncertainty in Economics*, Academic Press, New York, 1978.

MAECO -406 MONETARY ECONOMICS

UNIT I: Demand for and Supply of Money

The demand for money - Tobin's portfolio selection and Baumol's transaction demand for money

- Friedman's restatement of quantity theory of money - Supply of money - Inside and outside money, Gurley-Shaw's approach - Concept of exogenous money supply, Friedman's theory - Endogenous money supply, Kaldor's theory.

UNIT II: Inflation, Monetarism and New-Classical Macroeconomics

Keynesian theory of inflation - Phillips Curve - Monetarism: Basic elements of monetarism - Monetarist theory of income determination and inflation - Friedman-Phelp critique of Phillips Curve and money supply rule.

Price behaviour and expectation: Adaptive and rational expectations - New-classical economics, real business cycle and economic policy.

UNIT III: Problems in Asset Pricing

Returns from assets and risk - Measure of risk, diversification - Risk' in a Portfolio, Cost of capital, traditional theory and Modigliani - Miller theorem - Capital asset pricing model and arbitrage pricing model.

UNIT IV: Financial Market

Role, structure and characteristics of money market and capital market, Primary and secondary market for securities, treasury bill and commercial bill market - Discount market, government securities, markets for derivatives, futures and options - types, uses and pricing of derivatives - depth, breadth and resilience of markets, construction of Sensex and Nifty.

UNIT V: Indian Financial Institutions

Working of capital market and SEBI - Commercial banks, co-operatives, regional rural banks (RRBs), problems of micro finance, self-help groups (SHGs) - Non-bank financial intermediaries (NBFIs): Insurance institutions: Life and general insurance, mutual benefit funds.

Recommended Readings:

Keynes, J. M., *General Theory of Employment, Interest and Money*, Macmillan, London, 1936. Chandler, L. V. and S. M. Goldfeld, *The Economics of Money and Banking*, Harper & Row, New York, 1977.

Bhole, L. M., *Financial Institutions and Markets*, Tata McGraw Hill Company Ltd., New Delhi, 1999.

Gupta, S B, *Monetary Economics Institutions and policy*, S.Chand& Co., New Delhi, 1995.

Patinkin, *Money, Interest and Prices*, Harper and Row, New York

Khan M. Y., *Indian Financial System*, Tata McGraw Hill, New Delhi, 1996. Coghlan, R., *The Theory of Money and Finance*, Macmillan, London, 1980 Frisher, H, *Theories of Inflation*, Cambridge University Press, 1983.

Sheffrin, S.M., *Rational Expectation*, Cambridge University Press, 1996.

Higgins, Monetary Economics.

MAECO -407 PUBLIC FINANCE –II

UNIT - I: Public Budget

Classification of public budget: Incremental budget & zero-base budget - different measures of deficits in budget - Revenue deficit, primary deficit and fiscal deficit; different types of deficit, measures to reduce different deficits, problems of budget deficit in India.

UNIT - II: Public Debt

Differences between private debt and public debt; Sources of government borrowing; effects of public debt; Ricardian equivalence; burden of public debt, Domar's model, management of public debt.

UNIT - III: Fiscal Policy in a Closed 'Economy

Instruments of fiscal policy: tax, borrowing and expenditure, anti cyclical fiscal policy in a closed economy. Crowding-out effects of government expenditure, its criticisms.

UNIT - IV: Fiscal Policy in an Open Economy

Relation between fiscal, monetary & exchange rate policies. Deficit spending and its effect on money stock, exchange rate, export, import and capital movement. Changes in tax rate and its effect on the movement of foreign capital.

UNIT - V: Fiscal Federalism

Principles of division of financial resources in a federation - horizontal and vertical imbalance - Finance Commission and Planning Commission in resources transfer from centre to the states in India.

Recommended Readings:

Musgrave, R. A., *The Theory of Public Finance*, McGraw Hill, Kogakhusa, Tokyo, 1959.

Musgrave, R. A. and P. B. Musgrave, *Public Finance in Theory and Practice*, McGraw Hills, Kogakhusa, Tokyo.

Buchanan, J. M., *The Public Finances*, Richard D Irwin, Homewood, 1970.

Jha, R., *Public Economics*, Routledge, London, 1998.

Atkinson, A.B., and J. E. Stiglitz, *Lectures on Public Economics*, Tata McGraw Hill, Newyork, 1980.

Peacock, A. and C. K. Shaw, *The Economic Theory of Fiscal Policy*, George Allen and Unwin, London, 1978.

Buchanan, J. M., *Public Principles of Public Debt - A Defence and Restatement*, Richard Irwin, Homewood, 1958.

Musgrave, R. A. and C. Shoup (Eds.), *Readings in the Economics of Taxation*, George Allen and Unwin, London, 1970.

Chelliah, Raja J. et al, *Trends and Issues in India's Federal Finances*, National Institute of Public Finance and Policy, New Delhi, 1981.

Rao, Govinda *Political Economy of Federalism in India* - Oxford University Press.

Rao, Govinda, State Finances in India Issues and Challenges (Article) *Economic and Political Weekly* - 03-08- 2002.

MAECO -408 STATISTICS

UNIT - I: Probability

The concept of a sample space & elementary events - mutually exclusive events, dependent & independent events, compound events - a-priori & empirical definition – Addition & multiplication theorems - Compound and conditional probability - Bayes' theorem.

UNIT - II: Probability Distribution

Random variable, probability function and probability density function - expectation, variance, covariance, variance of a linear combination of variables, moments & moment generating functions - Binomial, Poisson, Beta, Gamma & Normal distributions: Derivation of moments around origin and moments around mean - Standard normal distribution.

UNIT III: Statistical Inference

Concept of sampling distribution - χ^2 , t and F distributions and their properties - Type I and type II errors, - One tailed and two tailed tests - Testing of hypotheses based on Z, χ^2 , t and F distributions.

UNIT - IV: Correlation & Regression

Simple correlation and its properties - Range of correlation coefficient - Spearman's rank correlation (tied and untied).

Regression: OLS, its assumptions, estimation of two regression lines - angle between two regression lines - Properties of regression coefficients - standard error of regression coefficients - Partial and multiple correlation., General regression model, regression coefficients and their testing of significance.

UNIT - V: Index Number and Time Series

Index Number - Laspeyres', Paasche's and Fisher's index numbers - Tests for ideal index

number - Base shifting, base splicing and deflating - Concept of constant utility index number
Time series - Components of time series - Methods of estimation of linear and non-linear trend.

Recommended Readings:

Nagar, A.L. and R. K. Das, *Basic Statistics*, Oxford University Press, New Delhi, 1993.

Gupta, S. C., *Fundamentals of Applied Statistics*, S. Chand and Sons, New Delhi, 1993.

Goon, A M., M.K.Gupta and B.S. Dasgupta, *Fundamentals of Statistics, Vol. I and Vol.II*, The World Press Limited, Calcutta, 1996.

Kapoor, J.N. and H.C. Saxena, *Mathematical Statistics*, S. Chand & Company, New Delhi, 1992. Millar, J., *Statistics for Advanced Level*, Cambridge University Press, Cambridge, 1996.

Hogg, R.V. and A.T.Craig, *Introduction to Mathematical Statistics*, Macmillan Publishing Co., New York, 1970.

Gupta, S.C. and V.K. Kapoor, *Fundamentals of Applied Statistics*, S. Chand and Sons, New Delhi, 1993.

MAECO-501 DEVELOPMENT ECONOMICS -I

UNIT I: Concept of Economic Development

Economic growth and economic development - Measurement of economic development: Problems in measures of development, human development index - Obstacles to economic development: weak Property rights, low ability to create and adopt new technology, low levels of human and physical capital- Kuznets' characteristics of modern economic growth.

UNIT II: Theories of Underdevelopment

Dualism and backward bending supply curve - Vicious circle of poverty - Nelson's low level equilibrium trap - Leibenstein's critical minimum effort - Paul Baran's theory of underdevelopment - Myrdal's theory of cumulative causation.

UNIT III: Classical, Schumpeterian and Marxian Theories of Growth

Theories of Adam Smith, Ricardo, Malthus and their critical evaluation - Schumpeter's theory - Marx and theory of reproduction.

UNIT IV: Neo-classical and Cambridge Models of Economic Growth

Harrod and Damar models and unstable growth - Neo-classical model of Solow - Cambridge model (Joan Robinson only).

UNIT - V: Technical Change

Hicksian and Harrodian versions of neutral technical progress - Labour and capital augmenting technical progress (Harrod and Solow versions only) - Disembodied and embodied technical progress. An overview of endogenous growth theory - growth under vintage capital model.

Recommended Readings:

Sen, A. (Ed), *Growth Economics*, Penguin, Harmondsworth, 1990.

Adelfllfln1 J., *Theories of Economic Growth and Development*, Stanford University Press, 1961. Domar, E.D., *Essays in Theory of Economic Growth*, Oxford University Press, New York.

Arrow, K. J., *The Economic Implications of Learning by Doing*, *Review of Economic Studies*, Vo1.29, pp.155-73.

Kaldor, N., *Essays on Economic Stability and Growth*, Duckworth, London, 1980. Solow, R. M., *Growth Theory: An Exposition*, Oxford University Press, 2000.

Allen, R.G.D., *Macroeconomic Theory*.

Meier, G, *Leading Issues in Economic Development*, Oxford University Press, New Delhi, 1990. Higgins, B., *Economic Development*, W.W. Norton, New York, 1959.

Baran, Paul, *Political Economy of Growth*, Monthly Review Press, New York, 1967. Todaro, M.P., *Economic Development*, Longman, London, 1996.

Myrdal, G., *Economic Theory and Underdeveloped Regions*, Duckworth, London, 1957.

Roy, D., *Development Economics*, Oxford University Press;

UNDP, *Human Development Reports*, Oxford University Press. Thirwal, A.P., *Growth and Development*, Macmillan, London, 1999.

Hayami, Yujiro, *Development Economics*, Oxford University Press, 2001

MAECO -502 INTERNATIONAL ECONOMICS –I

UNIT I: Comparative Cost and Opportunity Cost Models

Review of theory of comparative advantage - Ricardo model, modified Ricardian model, Haberler's opportunity cost theory - Production possibility curves, Trade under increasing, decreasing and constant cost conditions.

UNIT-II: Trade, Factor Endowments and Factor Price

Heckscher-Ohlin theory - Its proof; - Leontief Paradox and its critical evaluation (Mead's view) Stolper - Samuelson theorem - factor price equalization theorem, Samuelson's proof, Hicksian proof, criticisms of the theorem. Trade under imperfect competition.

UNIT III: Terms of Trade

Net barter, gross barter, income terms of trade, single and double factorial terms of trade, real cost and utility terms of trade; offer curves, its elasticity and terms of trade.

UNIT IV: Tariff

Arguments of tariff, - Impact of tariff: Partial and general equilibrium analysis - Game theoretic approach to tariff - Tariff and income distribution.

UNIT - V: Trade and Economic Growth

Growth in factor endowments and international trade, Rybczynski theorem -Bhagwati's views on immiserising growth - Technical change and international trade: Neutral, capital saving and labour saving technical progress and their impact on terms of trade.

Recommended Readings:

Mannur, H.G, *International Economics*, Vikash Publishing House, 1983. Kindleberger, C.P. *International Economics*, R.D. Irwin, Homewood, 1991. Soderston, Bo, *International Economics*, The Macmillan Press Ltd., London, 1991

Salvator, D, *International Economics*, Prentice Hall, Upper Saddle River, N.J.New York, 1997.

Bhagwati, J. (Ed.), *International Trade: Selected Readings*, Cambridge University Press, Massachusetts, 1981

Viner, Jacob, *Studies in the Theory of International Trade*, Harper and Row, New York

Grable, J.O., *International Financial Markets*, Prentice Hall, New York, 1996.

Meade, LE, *Theory of International Economic Policy*, Oxford University Press, London,

1968. Meier, G.M., *The International Economics of Development*, Harper and Row, New

York, 1968. Cherunilam, Francis, *International Economics*, Tata McGraw-Hill Publishing

Company Limited, New Delhi, 1999.

Pilbeam, Keith, *International Finance*, Macmillan, London, 1997.

MAECO-503 INDIAN ECONOMICS

UNIT I: National Income, Employment and Price Behaviour

National income - Trends in growth and structure, performance of different sectors. Employment and unemployment: Recent trends and estimates - Changing structure and emerging issues - Labour market reforms - Inflation: recent trends in prices in India and its causes, price stability.

UNIT II: Agriculture

Agricultural performance: Growth and productivity - Economic reforms and their impact on agriculture - Agricultural policy - Institutional reforms.

UNIT III: Industry

Evolution of Indian industries: An overview - Evaluation of industrial policies of 1948 and 1956 - PSUs: Performance and shortcomings - PSUs and disinvestment debate - Economic reforms and industry.

UNIT IV: Infrastructure

Physical infrastructure: Power, transport and communication - Financial infrastructure: Bank - Social infrastructure: Education and healthcare - Institutional infrastructure: Market - Financing infrastructure: Problems and policies.

UNIT V: Public Finance and Economic Reforms

Trends in revenue and expenditure of central and state governments - Public debt - Characteristics of tax reforms in India - Deficit financing and price behaviour in India: Consequences and policy suggestions.

Rationale for economic reforms- Main components of structural reforms - Evaluation of structural reforms - Impact of WTO on Indian economy - Foreign capital and MNCs in India.

Recommended Readings:

Bardhan, P., *The Political Economy of Development in India*, Oxford University Press, New Delhi, 1999.

Jalan, B., *The Indian Economy-Problems and Prospects*, Viking, New Delhi, 1992.

Ahluwalia, I.J. and I. M. D. Little (eds.), *India's Economic Reforms and Development* (Essays in Honour of Manmohan Singh), Oxford University Press, New Delhi, 1999.'

Kapila, Uma (Ed.), *India's Economic Reforms*, Academic Foundation, New Delhi. Government of India, *Economic Survey* (Annual), Ministry of Finance, New Delhi.

Parikh, K.S., *India Development Report - 1999-2000 and 2001-02*, Oxford University Press, New Delhi.

Byres, T. J. (Ed.), *The Indian Economy: Major Debates Since Independence*, Oxford University Press, New Delhi, 1998.

Dreze, J and A. Sen, *India: Economic Development and Social Opportunities*, Oxford University Press.

Dutt and Sundaram, (Latest edition) *Indian Economy*, S. Chand and Company, New Delhi.

MAECO-504

ENVIRONMENT AND POPULATION ECONOMICS

UNIT I: The Economy and the Environment

Components of environment - Interlinkages between the economy and the environment - Environmental economics vs. natural resource economics; Common Property Resources - Open Access, tragedy of Commons - Environmental degradation as market failure - Externality - Coase theorem, market efficiency through negotiations, critical evaluation.

UNIT II: Environmental Valuation

Use values and non-use values - Direct methods of valuation: Contingent valuation method - Indirect methods of valuation: Hedonic pricing and travel cost method.

UNIT III: Environment and Development

Environment-development trade-off - Population, poverty and environment - Environmental Kuznets curve - Trade and environment - Concept and indicators of sustainable development - Rules to sustainability - Concept of Green Accounting.

UNIT IV: Population Growth and Fertility

Trends of population growth since the beginning of 20th century - Basic measures of demography - Rates and ratios - Data sources: Census, surveys and vital statistics. Measures of fertility - CBR, GFR, TFR, cumulative fertility rate, child women ratio, gross and net reproduction rate. Easterlin's and Becker's theories of fertility and their critical evaluation.

UNIT V: Mortality

Basic measures - CDR, age specific death rate - Early neonatal, neonatal and infant mortality rate

- Life table, complete and abridged life table and their construction - Trends of mortality in developed and developing countries - Determinants of mortality.

Recommended reading:

Hanley N, J.F. Shogern and Ben White, *Environmental Economics in Theory and Practice*, Macmillan, 1997.

Kolstad, C.D., *Environmental Economics*, Oxford University Press, New Delhi, 1999.

Sankar,U. (Ed), *Environmental Economics*, Oxford University Press, New Delhi, 2001.

Dasgupta, Partha, *The Control of Resources*, Oxford University Press, New Delhi, 1982.

Chopra, K., G.K. Kadekodi and K.N. Murty, *Participatory Development: An Approach to the Management of Common Property Resources*, SAGE, New Delhi, 1990.

Dasgupta, P.S. and G.M: *Heal, Economic Theory and Exhaustible Resources*, Cambridge University Press, Cambridge, 1985.

Bhattacharya, R.N. (Ed), *Environmental Economics - An Indian Perspective*, Oxford University Press, New Delhi, 2001.

Shryock, H., *The Methods and Materials of Demography*. Bogue, D J., *Principles of Demography*

Goon, Gupta & Dasgupta, *Fundamental Statistics* (Vol-II) Kapoor, V K, *Fundamental of Applied Statistics*.

MAECO -505 DEVELOPMENT ECONOMICS -II

UNIT I: Approaches to Economic Development

Traditional approach to development: Balanced vs. unbalanced growth - Rosenstein Rodan's theory of big push - Nurkse's model- Hirschman's theory - Ranis-Fei model.

Unit - II: Human Capital and Social Capital

Process of human capital formation, human capital and unemployment. Community approach to development: State, market and community - Market and prisoner's dilemma- Community, social capital and development - Critical evaluation of the social capital approach to development.

Unit - III: Allocation of Resources,

Need for investment criteria in developing countries - Alternative investment criteria: Rate of turnover criterion, social marginal productivity criterion, marginal per capita reinvestment criterion and time series criterion - Cost-benefit analysis of projects: Little-Mirrlees.

UNIT IV: Development Planning

Rationale for planning in a developing economy - Input-output model, closed and open - Samuelson's substitution theorem, Hawkins-Simons condition; sectoral projections in planning - Plan models in India: Mahalanobis model - and the Fifth Plan Model - Plan in a market oriented economy.

UNIT V: Trade and Political Economy of Development

Import substitution and export-led growth - Krueger's model of rent seeking society - Institutions and development: Contribution of Stephen Knack and Philip Keefer - foreign direct and institutional investments and economic development - foreign aid and economic development.

Recommended Readings:

Sen, A. (Ed), *Growth Economics, Penguin*, Harmondsworth, 1990.

Adelfllfln1 J., *Theories of Economic Growth and Development*, Stanford University Press, 1961. Domar, E.D., *Essays in Theory of Economic Growth*, Oxford University Press, New York.

Arrow, K. J., *The Economic Implications of Learning by Doing*, *Review of Economic Studies*, Vo1.29, pp.155-73.

Kaldor, N., *Essays on Economic Stability and Growth*, Duckworth, London, 1980. Solow, R. M., *Growth Theory: An Exposition*, Oxford University Press, 2000.

Allen, R.G.D., *Macroeconomic Theory*.

Meier, G, *Leading Issues in Economic Development*, Oxford University Press, New Delhi, 1990. Higgins, B., *Economic Development*, W.W. Norton, New York, 1959.

Baran, Paul, *Political Economy of Growth*, Monthly Review Press, New York, 1967. Todaro, M.P., *Economic Development*, Longman, London, 1996.

Myrdal, G., *Economic Theory and Underdeveloped Regions*, Duckworth, London, 1957.

Roy, D., *Development Economics*, Oxford University Press;

UNDP, *Human Development Reports*, Oxford University Press. Thirwal, A.P., *Growth and Development*, Macmillan, London, 1999.

MAECO -506 INTERNATIONAL ECONOMICS –II

UNIT I: Balance of Payments

Components of balance of payments - Relative importance of current account and capital account - Balance of payments adjustment: Absorption and Monetary approaches

UNIT - II: Foreign Exchange Market

Fixed and floating exchange rates: their advantages and disadvantages; Foreign exchange market - Exchange rate determination: Purchasing power parity theory - Interest parity theorem, interest arbitrage, hedging, premium and discount.

UNIT III: Theory of Regional Blocks

Theory of regional blocks: Stages of Regional integration - preferential trading, free trade area, Trade diversion and Trade Creation, Customs Union and Common Market.

UNIT IV: International Trade and Monetary Order

Trade and Gold standard, Collapse of the Gold Standard in the inter-war period; Bretton - Woods System, IMF and World Bank, fixed exchange rate and its working, collapse of the Bretton-Woods System, and emergence of the floating exchange rate system; Multilateralism - GATT and WTO regime.

UNIT V: Problems of Policy in an open economy

Tinbergen on Targets and Instruments; internal and external balance, Swan diagram, flexible exchange rate and problems in maintenance of monetary and fiscal policies, and maintenance of current and capital accounts balance.

Recommended Readings:

Mannur, H.G, *International Economics*, Vikash Publishing House,.1983. Kindleberger, C.P. *International Economics*, R.D. Irwin, Homewood, 1991. Soderston, Bo, *International Economics*, The Macmillan Press Ltd., London, 1991

Salvator, D, *International Economics*, Prentice Hall, Upper Saddle River, N.J. New York, 1997.

Bhagwati, J. (Ed.), *International Trade: Selected Readings*, Cambridge University Press, Massachusetts, 1981

Viner, Jacob, *Studies in the Theory of International Trade*, Harper and Row, New York

Grable, J.O., *International Financial Markets*, Prentice Hall, New York, 1996.

Meade, LE, *Theory of International Economic Policy*, Oxford University Press, London,

1968. Meier, G.M., *The International Economics of Development*, Harper and Row, New

York, 1968. Cherunilam, Francis, *International Economics*, Tata McGraw-Hill Publishing

Company Limited, New Delhi, 1999.

Pilbeam, Keith, *International Finance*, Macmillan, London, 1997.

MAECO -507 NORTH-EAST ECONOMICS

UNIT I: Structure of North East Economy

North East economy: An overview - Basic Features of North East economy - Relative performance of the North East economy in the country.

Economic performance of the region - Level and growth of NSDP and Per Capita NSDP - Changing sectoral composition of state income and sectoral contribution to the growth of income with respect to Arunachal economy.

Natural Resource Base - Land, mineral; water and forests - Status of human development in N.E. India.

UNIT II: Population in North East India

Population: Trends and features, causes for its rapid growth, population growth and economic development.

Urbanization: Trends and features, causes for rapid growth and consequences. Work force structure and its changes, participation of female labour force, unemployment situation in North East India.

UNIT III: Agriculture in North East India

Agricultural practices in the region - Permanent cultivation, shifting cultivation and its effects - Jhum cultivation and the problem of induction of new technology

Land tenure and problems of agricultural credit - Land use pattern and cropping pattern in North East India - Need for land reforms with special reference to Arunachal Pradesh- Agricultural productivity - Causes of low productivity

UNIT IV: Development of Secondary and Tertiary Sectors in North East

Status of industry: Cottage and small scale-agro-based industries, medium and large scale industries - Factors inhibiting the growth of industries - Infrastructure development: Power, transport, communication, market and banking: NEDFi, SIDBI, IDBI.

UNIT V: The Policy Framework

State of public finance and fiscal issues in North Eastern economy with special reference to Arunachal Pradesh. Five year plans of the states (with special emphasis on the state of Arunachal Pradesh). Problems and prospects of North East economy in the background of economic liberalization of India - Opening of NE economy and 'Look East' policy of the government of India.

Recommended Readings:

NEDfi Data Bank, *Quarterly Journal of Northeastern States*, Different Years.

Alam, K (Ed), *Agricultural Development in Northeast India*, Deep and Deep Publications, New Delhi, 1993.

Banerjee, Amalesh and BimanKar (Ed), *Economic Planning and Development of North-eastern States*, Kanishka Publishers and Distributors, New Delhi, 1999.

Behera, M.C. and N.C. Roy (Eds), *Trends in Agrarian Structure in the Hills of Northeast India*, Commonwealth Publishers, New Delhi, 1997.

MAECO -508 AGRICULTURAL ECONOMICS

UNIT I: Introduction to Agricultural Economics

Nature of Agricultural economics - Interdependence and complementarities between agriculture and industry - Agriculture, poverty and environment - Farming Systems - Farm size and practices - Farm efficiency measure - Resource management in agriculture.

UNIT II: Issues in Farm Management

Nature of agricultural production function: Cobb-Douglas, Spillmans - Risk and uncertainty in agricultural production and prices - Decision theory - Cobweb theorem - Nerlove's model - Agricultural marketing - Marketed and marketable surplus - Mathur-Eizkel hypothesis - Farm size and productivity - Pricing policy (including support price).

UNIT III: Theories of Agricultural Development

Problems of labour surplus economy - Lewis' and Jorgenson's models - Theories of agricultural development: Schultz, Mellor and Boserup - Farm household models: Chayanov, Barnum-Squire and Low's models.

UNIT IV: Institutions and Agriculture

Land tenure system - Types of tenancy - Tenant-landowner model: Marshall and Cheung models - Rural credit market: Lenders' risk hypothesis, monopolistic credit market - Characteristics of semi-feudalism - Stagnation under semi-feudalism (Bhaduri's model), criticism of Bhaduri's model.

UNIT V: Issues in Agricultural Development in India

Agricultural system in India - Problems of diffusion of new technology - Limited spread of green revolution - Mode of production debate in India: Rudra, Patnaik and Chattopadhyaya's views only - Intersectoral terms of trade - Food security - The state and agriculture - WTO and Indian agriculture.

Recommended Readings:

Heady, E.O., *Economies of Agricultural Production and Resource Use*, Prentice Hall. Ellis, Frank, *Peasant Economics: Farm Household and Agrarian Development*, Cambridge University Press.

Foster, G.W. and M.C. Leoger, *Elements of Agricultural Economics*, Prentice Hall. Bardhan, P .K.,*Interlocking Factor Markets and Agrarian Development: A Review of Issues*, Oxford Economic Paper, Vol- 32, No., 1980.

b. Credit Weightage per Paper and Semester

*4 Credits= 64 Hours in Each Paper (includes lectures, seminars, workshops, assignments, practical etc.)

** 1 credit= 16 periods/16 hours per month

***4 hours per week

**** Total credits per semester: No. of papers 4 x 4 credit points= 16 credits

Paper Code and Title	External Marks	Internal Marks	Total Marks	Credit	Teaching Hours
First Semester:					
MAECO- 401 Micro-Economic Theory-I	70	30	100	5	80 hrs
MAECO- 402 Macro-Economic Theory	70	30	100	5	80 hrs
MAECO- 403 Public Finance –I	70	30	100	5	80 hrs
MAECO- 404 Mathematics	70	30	100	5	80 hrs
Second Semester:	70	30	100	5	80 hrs
MAECO- 405 Micro Economic Theory-II	70	30	100	5	80 hrs
MAECO- 406 Monetary Economics	70	30	100	5	80 hrs
MAECO- 407 Public Finance –II	70	30	100	5	80 hrs
MAECO- 408 Statistics	70	30	100	5	80 hrs
Third Semester:					
MAECO -501 Development Economics –I	70	30	100	5	80 hrs
MAECO -502 International Economics-I	70	30	100	5	80 hrs
MAECO -503 Indian Economics	70	30	100	5	80 hrs
MAECO -504 Environment and Population Economics	70	30	100	5	80 hrs
Fourth Semester	70	30	100	5	80 hrs
MAECO -505 Development Economics-II	70	30	100	5	80 hrs

MAECO -506 International Economics -II	70	30	100	5	80 hrs
MAECO -507 North East Economics	70	30	100	5	80 hrs
MAECO -508 Agricultural Economics	70	30	100	5	80 hrs
Total			1600	80	

Evaluation Scheme

Each paper is of 100 marks and 5 credits with 80 teaching hours. The weightage for written and Internal Assessment in each paper is 70% and 30% respectively. The pass marks for internal and external examinations are 45% separately. There shall be three sections i.e. A, B & C for external theory examination for each paper. Section A will be of 20 marks. There shall be 05 questions carrying 01 question from each unit and the candidate has to attempt 04 questions each carrying 05 marks. Section B will consist of 30 marks. There shall be 04 questions; one from each unit and the candidate has to attempt 03 questions each carrying 10 marks. Section C will consist of 30 marks. There shall be 04 questions one from each unit and candidate has to attempt 02 questions each carrying 15 marks. The duration of theory paper shall be three hours.

30 marks of internal assessment will be awarded on the basis of assignment submitted in each semester. The pass mark for assignment is 40%. Students unable to secure pass mark in assignments will not be eligible to appear for the end semester examination.