Krishnath College
Department of Economics
Berhampore -742101
Murshidabad, West Bengal, India

Course and Program Outcomes of Economics Honours (B.A/B.Sc) Under CBCS

Semester: I

Economics Core Course-1: ECON-H-CC-T-01
Course title: Introductory Microeconomics
Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

In this course, students will understand the fundamentals of microeconomic theory. They will get the basic idea about -

- the scope and methods of economics, the economic themes, decision making, principles of economic interactions -trade off, thinking like an economist: the question of what to produce, how to produce and how to distribute output; marginal benefits and marginal costs; opportunity cost (private and social); the basic competitive model.
- reading and working with graphs
- workings of the market - demand and supply, market and adjustments, market sensitivity, Elasticity concepts and government intervention
- The consumption decision – budget constraint, consumption and income and price changes, demand for all other goods and price changes; description of preferences – most preferred bundle and its properties; consumers' optimum choice.
- Defining a firm – firm's legal forms; profit maximization hypothesis, Technology- general concept of production function; returns to factor and returns to scale, isoquants and diminishing rate of factor substitution – elasticity of substitution. short run and long run costs; cost curves in the short run and long run; relation between short run and long run costs.

Economics Core Course 2: ECON-H-CC-T-02
Course title: Mathematical Methods for Economics – I
Total Marks: 75 [Written: 60+ Internal Assessment: 10 +Attendance: 05]

After completion of the course, students will understand the fundamentals of preliminary mathematical techniques for economic analysis. They will get the basic idea about -

- Logic and proof techniques; sets and set operations; relations; functions and their properties; number systems. Convex sets; geometric properties of functions: convex functions; their characterizations; properties and applications; further geometric properties of functions: quasi-convex functions, their characterizations, properties and applications; limit and continuity. **(All of these are to be taught in the case of single variable only.)**

- Continuous functions of different types and their graphs – quadratic, polynomial, power, exponential, and logarithmic; Derivatives of first and second order and their properties; convex , concave and linear function. Application in economics – concept of marginal.

- Local and global optima; Geometric characterizations; characterizations using calculus;

Applications in Economics – profit maximization and cost minimization.

- Integration of different types of functions; Methods of substitution and by parts; Applications in Economics – obtaining total from marginal.

- Finite difference; Equations of first and second orders and their solutions; Applications in Economics – Cobweb model.

Semester: II

Economics Core Course 3: ECON-H-CC-T-03
Course title: Introductory Macroeconomics
Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

In this course, students will understand the fundamentals of macroeconomic theory. They will get the basic idea about -

- Circular flow of income, closed and open economy .Macroeconomic data- National Income accounting and cost of living; Concept of Growth- role of savings, investment,; Open Economy-; Concept of unemployment- Types and their characteristics.
- Simple Keynesian System: Multipliers; equilibrium in both closed and open economy and stability; autonomous expenditure, balanced budget, and net exports; paradox of thrift.
  IS-LM Model – concept of equilibrium.

- Monetary system- definition and functions of money and determinants of money supply; inflation and its costs.

Economics Core Course 4: ECON-H-CC-T-04
Course Title: Mathematical Methods for Economics – II
Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to make economic analysis using mathematics. This is a sequel to the course Mathematical Methods for Economics – I.
They will get the basic idea about –

- Matrix: its elementary operations; different types of matrix; Rank of a matrix; Determinants and inverse of a square matrix; solution of system of linear equations; Input Output System.

- Continuous and differentiable functions: partial derivatives and Hessian matrix. Homogeneous and homothetic functions. Euler's theorem, implicit function theorem and its application to comparative statics problems. Economic applications- theories of consumer behaviour and theory of production.
- Optimization of nonlinear functions: Convex, concave, and quasi-concave functions; Unconstrained optimization; Constrained optimization with equality constraints- Lagrangian multiplier method;; Economic applications – consumer behaviour and theory of production.

  Optimization of linear function: Linear programming; concept of slack and surplus variables (graphical solution only).

- Solution of Differential equations of first order and second order; Economic application-price dynamics in a single market- multimarket supply demand model with two independent markets. Qualitative graphic solution to 2x2 linear simultaneous differential equation system- phase diagram, fixed point and stability (just concepts).

SEMESTER III

Economics Core Course 5: ECON-H-CC-T-05
Course Title: Intermediate Microeconomics – I

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to understand the fundamentals of microeconomic theories in the context of a market economy.
They will get the basic idea about-

- Cardinal utility; Preference; ordering and properties of ordinal utility; existence of utility functions, different utility functions and their properties, compensating and equivalent variation, Slutsky equation; consumption-leisure choice and labour supply; choice under uncertainty (expected utility and risk aversion), inter-temporal choice and savings decision; revealed preference approach.

- Technology – general concept of production function; returns to factor and returns to scale, isoquants and diminishing rate of factor substitution – elasticity of substitution – some examples of technology (fixed proportion, perfect substitute, Cobb-Douglas Production Function, CES Production Function), General concept of homogeneous and homothetic production function and their properties; production with one and more variable inputs; isocost line and firm's equilibrium and expansion paths; short run and long run costs; cost curves in the short run and long run: relationbetween short run and long run costs.
- Short run and long run equilibrium; determination of the supply curve of the firm and the industry: with reference to external economies and diseconomies of scale.

- Derived demand for input, marginal product and marginal revenue product, input demand for competitive firm and competitive industry, returns to scale and product exhaustion.

Economics Core Course 6: ECON-H-CC-T-06

Course Title: Intermediate Macroeconomics – I

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After the completion of the course the students will be able to understand the fundamental macroeconomic theories in the context of a market economy. They will get the basic idea about-

- IS-LM Model - equilibrium, stability and comparative statics; effects of fiscal andmonetary policies, real balance effects.

- Derivation of aggregate demand assuming price flexibility; Derivation of aggregatesupply curves both in the presence and absence of wage rigidity; equilibrium, stability, and comparative statics-effects of monetary and fiscal policies; Unemployment and its causes- possible solutions, including real balance effect and wage cut policy.

- Know about inflation, Types and cost of Inflation. Inflation and unemployment trade-off-Short run and long- run Phillips curve under adaptive expectations-outcome under rational expectations (non-rigorous).

Economic Core Course7: ECON-H-CC-T-07

Course Title: Statistical Methods for Economics

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to know the basic statistical applications necessary for economic data analysis. They will get the basic idea about-

- Sample space and events; Probability axioms and properties; counting techniques;conditional

probability; Bayes' rule and independence of events; Random variable and probability distributions- Discrete and continuous. Expectation of a random variable.

- Discrete distribution-Binomial, Poisson; Continuous Distributions- Normal, (Properties;mean and variance). Central Limit Theorem and Law of Large Numbers (Concepts only).

- Density function of Bivariate normal distribution and obtaining means, variances, and correlation coefficients.

- Concept of sampling and random sampling. Principal steps in a sample survey; methodsof sampling;-SRSWR, SRSWOR, Stratified sampling. Sampling vs non-sampling error.

- Parameters and statistics; Point estimation-Properties of a good estimator; Maximum Likelihood Method and the method of moments; Estimation of population parameters using SRSWR and SRSWOR; Interval estimation (Concepts only).

SEMESTER – IV

Economics Core Course 8: ECON-H-CC-T-08
Course Title: Intermediate Microeconomics – II
Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to learn the fundamentals of microeconomic theories. They will get the idea about-

- Exchange Economy, Consumption Allocation and Pareto Optimality; Edgeworth box and contract curve; Equilibrium and efficiency under pure exchange.
- Pareto efficiency with production: concepts of PPF, SIC, and resource allocation;
- Perfect competition, Pareto efficiency and market failure (externalities and public good); property right and Coase Theorem.

- Monopoly; pricing with market power; degree of monopoly; price discrimination-different degrees; multiplant monopoly; peak-load pricing; two-part tariff; monopolistic competition.
- Oligopoly; Non collusive. (Cournot Equilibrium, Bertrand Equilibrium, Stackelberg Equilibrium, Kinked Demand Curve) ; concept of collusion and cartels.
- Monopsony, bilateral monopoly in labour market; Externalities; public goods and markets with asymmetric information.

Economics Core Course 9: ECON-H-CC-T-09
Course Title: Intermediate Macroeconomics – II
Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to learn the fundamentals of macroeconomic theories. They will get the idea about-

- Classical System: Say's law and quantity theory; Classical dichotomy and neutrality ofmoney; Keynesian vs classical system.

- Consumption: Keynesian consumption function; Fisher's theory of optimal intertemporal choice; life-cycle and permanent income hypotheses; Dusenberry's relative income hypothesis;

Investment: MEC and MEI- Acceleration principle- fixed and variable.
Demand for money: Regressive expectations and Tobin's portfolio choice models;
Baumol's inventory theoretic money demand.

- Government debt and Ricardian equivalence; high-powered money; money multiplier analysis; monetary policy – OMO, Bank rate, variable reserve ratio, repo and reverse repo.
- Harrod- Domar model and Solow one sector growth model; golden rule; dynamicefficiency, technological progress.

Economics Core Course 10: ECON-H-CC-T-10

Course Title: Introductory Econometrics

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to learn the basics of econometrics. They will get the idea about-

- Definition and Scope of Econometrics; Importance of Error Term.
- Sampling Distributions-, Standard Normal and Chi-Square distribution, t- and F- distributions and their application in testing of hypothesis; Defining hypothesis; Distribution of test-statistics; testing hypotheses related to population parameters; Type I and Type II errors, power of test 2
- The model and the role of disturbance term ; Estimation of model by method ofordinary least squares (OLS);Gauss-Markov theorem, Reverse Regression, properties ofestimators; goodness of fit; testing of hypotheses and confidence intervals; scaling and units of measurement; prediction and forecasting, Problems in OLS Method.

SEMESTER – V

Economic Core Course: ECON-H-CC-T-11

Course Title: International Economics

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to know the fundamentals of international economics theories and some relevant empirical facts. They will get the idea about-

- Arbitrage as basis and direction of trade; fundamental sources of cross-country price differences and arbitrage; concept of comparative advantage; externalities, regulation and perverse comparative advantage; International equilibrium; offer curves, ToT and stability; Gains from Trade (GFT) Theorem; Concepts of Production possibility Frontier and Community Indifference curves; Illustration of GFT; Decomposition of GFT; Substitution possibilities and magnitude of GFT.
- Comparative versus Absolute Advantage, One-factor economy, production possibility frontier, relative demand and relative supply, terms of trade; Trade in Ricardian world, Determination of intermediate ToT, Complete specialization & GFT.
- H-O theorem and physical vs. price definitions of factor abundance; Properties of the HO model: Factor intensity ranking, one-to-one correspondence between commodity price ratio &

factor price ratio (Stolper-Samuelson theorem).

- Partial Equilibrium Analysis: Tariff - cost–benefit, Quota, Quota- Tariff equivalence & non-equivalence, effects of tariff, quota, subsidy and voluntary export restraint; General Equilibrium Analysis- distinction between large and small economy, welfare effects ofa tariff on small country and large country, Offer curve and ToT, Tariff ridden offer curve, Tariff war, Optimum tariff for large economy, Metzler's Paradox.
- Balance of Payment accounts in an open economy; Determination of National Income, Transfer problem, Introduction of foreign Country & repercussion effect - open economy multiplier with & without repercussion effect; Fixed &Flexible Exchange Rate: adjustment of demand and supply of Foreign Exchange, Effect of devaluation, Effects of exchange rate on domestic prices and ToT, Marshall-Lerner Condition, J-Curve effect.

Economic Core Course: ECON-H-CC-T-12

Course Title: Public Economics

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

In this course, students will acquire an understanding about-

- Definition and Scope of Public Economics; Externalities, Market Failure andGovernment Intervention; Coase Theorem; Public Expenditure to finance Development.
- Overview of Public Good; Characteristics of Pure Public Good; Distinction betweenPure Public Good and Private Good; Market Failure in case of Pure Public Good; Optimal provision of Public Goods; Private Provision and Public Provision of Public Goods; Lindahl Equilibrium, Voting Equilibrium.
- Classification of Taxes; Canons of Taxation; Benefit Principle; Equal Sacrifice Principle; Ability to Pay Principle; Incidence and Burden of Taxes; Effects of taxationon income distribution, work efforts, and on savings; the Laffer curve; Optimal Taxation.
- Meaning and Classification of Public Expenditure; government budget and its types; government expenditure and tax multipliers, balanced budget multiplier; FiscalFederalism in India; Meaning of Public Debt; Sources of Public Borrowings: internaland external borrowing; Effects of Public Debt.

SEMESTER VI

Economics Core Course: ECON-H-CC-T-13

Course Title: Indian Economy

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to know the current issues and problems facing Indian economy. In this course, students will acquire an understanding about-

- Major features of the economy at independence; Planning: Evolution of India's development goals and strategies – Structural constraints and Indian development strategy: Debates between growth and distribution, Public Sector vs. Private Sector, Consumer Goods vs. Capital Goods, Import Substitution vs. Export promotion; growth and development under different policy regimes – goals, constraints, institutions and policy framework; an assessment of performance –

sustainability and regional contrasts; structural changes, savings and investment including the saving-investment paradox.

- Demographic trends and issues; education; health and malnutrition.
- Trends and policies in poverty including Sen's Entitlement Analysis; inequality andunemployment.
- Monetary, Fiscal and Trade Policy Reforms.

Economics Core Course: ECON-H-CC-T-14
Course Title: Development Economics
Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to know the current theoretical and empirical issues and problems concerning economic development. In this course, students will acquire an understanding about-

- Income Approach and Capability Approach, Construction and Interpretation of HDI; International Variations in Development Measures, Comparing Development Trajectories across Nations and within them; Dependency School of Development.
- Sector thesis of Fisher and Clark, Stages of Growth: Rostow and Marx
- Theory of Demographic Transition,; Malthusian Population Trap, Concept of optimum population; Low level equilibrium trap models of Nelson and Libenstein and their criticism.
- Poverty trap model of Nurkse, Big push Theory, Linkages- backward and forward, Theory of balance and unbalanced growth.
- Role of capital in Economic Development, significance of capital output ratio, role of technology and technical progress; Concept of Economic Dualism; Lewis model of Economic Development; Disguised unemployment, concept and measurement; Sen's model of Choice of Technique; Harris- Todaro model of Rural- urban migration.
- Inequality axioms; a comparison of commonly used inequality measures; Gender inequality; Connections between inequality and development; Poverty measurement, HPI; Poverty Traps and Path dependence of growth process.

LEARNING & SKILL OUTCOMESOF

SKILL ENHANCEMENT COURSES (SEC)

SEMESTER III

Economics SEC 1: ECON-H-SEC-T-01

Course title: Statistical Tools for Data Analysis

Total Marks: 50 [Written: 40+ Internal Assessment: 10]

This course introduces the student to collection and presentation of data. It also discusses how data can be summarized and analysed for drawing statistical inferences. The students will be introduced to important data sources that are available and will also be trained in the use of free statistical software to analyse data. The students are able to learn about-

- Sources of Data, Population versus sample surveys, Random sampling.
- Presentation of Data; Univariate Frequency Distribution; Measures of central tendency, Measures of Dispersion, Moments, Skewness and Kurtosis; Bivariate Frequency Distribution- correlation and regression.
- Time Series (Components, Measures of trend, Moving Average, Curve fitting (linear only)
- Index Numbers (Laspayer's, Paasche and Fisher, Cost of Living, Factor Reversal and Time Reversal Test)
- Vital Statistics (Life Tables – Concepts Only)

SEMESTER – IV

Economics SEC 1: ECON-H-SEC-T-02

Course title: Computer Application for Data Analysis

Total Marks: 50 [Practical: 40+ Internal Assessment: 10]

This course introduces the student to how to analyse primary and secondary data using computer software. The students will be introduced to important data sources that are available and will also be trained in the use of free statistical software to analyse data. The students are able to learn about-

- MS Excel programme and how to use MS Excel programme for data analysis. Relevant mathematical and statistical functions using MS Excel.

LEARNING OUTCOMESOF
DISCIPLINE SPECIFIC ELECTIVE SUBJECTS (DSE)

Semester: V

[Two mandatory Discipline Specific Elective Courses namely ECON-H-DSE-T-IA or ECON-H-DSE-T-1B and ECON-H-DSE-2A or ECON-H-DSE-2B should be selected]

Course: ECON-H-DSE-T-1A

Course title: Economic Development and Policy in India – I

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

This course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post- Independence period. The students will know about-

- Issues in Growth, Development and Sustainability
- Capital formation (Physical and Human); technology; institutions.
- Demographic trends; urbanisation.
- Occupational structure in the organised and the unorganised sectors; open-, under and disguised unemployment (rural and urban); employment schemes and their impact.
- Critical evaluation of growth, inequality, poverty and competitiveness, pre and post reforms era; savings and investment; mobilisation of internal and external finance; monetary andfiscal policies; centre-state financial relations.

Course: ECON-H-DSE-T-1B

Course Title: Money and Banking

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary managementand instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered. The students will learn about-

- Concept, functions, measurement; theories of money supply determination.
- Role of financial markets and institutions; problem of asymmetric information –adverse selection and moral hazard; financial crises.
- Money and capital markets: organization, structure and reforms in India; role offinancial derivatives and other innovations.
- Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.
- Balance sheet and portfolio management.
- Indian banking system: Changing role and structure; banking sector reforms.
- Functions, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy; current monetary policy of India.

Course: ECON-H-DSE-T-2A

Course Title: Public Finance

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the learner will be able to know the theories of public finance which will help them to solve many real lifeproblems facing fiscal policy and government budgets. The students will know about-

- Overview of Fiscal Functions, Tools of Normative Analysis, Pareto Efficiency, Equity and the Social Welfare
- Market Failure, Public Good and Externalities
- Elementary Theories of Product and Factor Taxation (Excess Burden and Incidence)
- Current Issues of India's Tax System

- Working of Monetary and Fiscal Policies
- Analysis of Budget and Deficits
- Fiscal Federalism in India
- State and Local Finances

Course: ECON-H-DSE-T-2B

Course Title: Environmental Economics

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the learner will be able to know the theories of environmental economics including the notion ofsustainable development. The students will know about-

- Pareto optimality and market failure in the presence of externalities; property rights andthe Coase theorem.
- Pigouvian taxes and effluent fees; tradable permits; choice between taxesand quotas under uncertainty; implementation of environmental policy.
- Trans-boundary environmental problems; economics of climate change; trade and environment.
- Non-Market values and measurement methods; risk assessment and perception
- Sustainable Development.

Semester: VI

[Two mandatory Discipline Specific Elective Courses namely ECON-H-DSE-T-3A or ECON-H-DSE-T-3B and ECON-H-DSE-4A or ECON-H-DSE-4B should be selected]

Course: ECON-H-DSE-T-3A

Course title: Economic Development and Policy in India - II

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

Building on the more aggregative analysis of trends in the Indian Economy offered in Economic Development and Policy–I, this course examines sector-specific trends inkey indicators and their implications in the post-Independence period. The students are able to learn about-

- Production trends; small scale industries; public sector; foreign investment.
- Production and productivity; credit; labour; markets and pricing; land reforms; regional variations.
- Balance of trade and balance of payments; India and the World Trade Organisation.

Course: ECON-H-DSE-T-3B
Course title: Economic History of India (1857-1947

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development inIndia to the compulsions of colonial rule. This course links directly to the course on India's economic development after independence in 1947. The students are able to learn about-

- Overview of colonial economy.
- National Income; population; occupational structure.
- Agrarian structure and land relations; agricultural markets and institutions – credit, commerce and technology; trends in performance and productivity; famines.
- Railways; the de-industrialisation debate; evolution of entrepreneurial and industrial structure; nature of industrialisation in the interwar period; constraints to industrial breakthrough; labor relations.
- The imperial priorities and the Indian economy; drain of wealth; international trade, capital flows and the colonial economy – changes and continuities; government and fiscal policy.

Course: ECON-H-DSE-T-4A
Course Title: Dissertation

Total Marks: 75 [Report writting: 50+ Presentationt: 25]

After completion of the course the student will be able to analyse economic data and also to write on empirical problems of economic life– especially with reference to India.

- A dissertation may be written on any issues pertaining to Indian economy and/or Global Economy in the present context or in the historical context. The students should be guided in how to analyse socio-economic data for this purpose.

Course: ECON-H-DSE-T-4B
Course Title: Financial Economics

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the learner will be able to know the fundamental theories of finance which have great relevance in reallife in the present context of globalization. Students will specially learn about-

- Deterministic cash-flow streams; Basic Theory of Interest; Discounting and present value; Internal rate of return; evaluation criteria; fixed income securities; bond prices and yields; the term structure of interest rates; yield curves; spot rates and forward rates.
- Single period random cash flows; Random asset returns; Portfolio of assets; Portfolio mean and variance; Feasible combinations of mean and variance;Mean-variance portfolio analysis.
- CAPM: The Capital Market Line; the Capital Asset Pricing Model; the beta of an asset and of a portfolio; the Security Market Line; the Use of the CAPM model in investment analysis and as a pricing formula.

- Introduction to derivatives and options; forward and futures contracts; Call and Put Options; Factors affecting option prices.
- Patterns of corporate financing, common stock, debt, preferences, convertibles, Capital structure and the cost of capital, corporate debt and dividend policy, the Modigliani- Miller theorem.

Program Outcomes of Economics Honours

Program Objective

The purpose of the Economics Honours Program is to provide the students a firm foundation in the discipline of Economics. This program has structured curricula which consists of core courses that encompass concepts, fundamental theories and general principles and provide a well-resourced learning environment for this dynamic subject. This program aims at enhancing students' ability to ask pertinent questions and to obtain solutions to these by using quantitative and qualitative reasoning, relate social reality with economics and use this knowledge for the material, social and cultural benefit of the individual self as well of the society.

Program Outcomes

On completion of the under-graduate Economics Honours Program, students will have acquired much knowledge and many skills.

PO1: An in-depth knowledge of the fundamental theoretical aspects which form the foundation of the discipline of Economics – microeconomics and macroeconomics; their applications in and extensions to sub-fields such as International Economics, Public Finance, Managerial Economics, Financial Economics, Environmental Economics, Development Economics and IndianEconomics.

PO2: learnt the synthesis of Mathematics and Economics: Application of mathematics for

understanding the different concepts of economics.

PO3: Acquired Research Orientation: an understanding about research methodology for identifying, formulating and analysing complex economic problems to substantiate and conclude by applying the knowledge of statistics., crucial learning skills in data collection, analysis and interpretation with appropriate statistical and econometric tools.

PO4; Learnt the usage of tools: Applying appropriate techniques for economic models with an understanding of the limitations.

quire prior knowledge about what to expect when dealing with the real-world data and be able to use the analytical skills acquired to explain real economic situations and phenomena critically, check the validity and accuracy of data and analyse data with effective statistical tools using statistical software and sharpentheir acumen for undertaking serious and effective research.

Environment and Sustainability: Understanding the impact of economic dynamics on environment and to determine the need for sustainable development, to evaluate the sustainable performance level of an economy.

Effective Communication: To communicate effectively with the society at large with better comprehension and to make effective presentations

Individual and Team work: To function efficiently as an individual and as ateam to share and shoulder responsibilities.

Critical Thinking: To analyse the economic situations critically and provide suggestions, checking the validity and accuracy using effective tools

Self-directed and Life-long Learning: Recognise the need for and engage in independent and life-long learning

Project Management and Finance: To demonstrate knowledge and to understand the economic and management principles, mange projects in multidisciplinary environment.

The ability to look into the contemporary economic issues of India and the rest of the world, interrelate them and propose suggestions for policy-making.

Programme Specific Outcomes of Economics honours

Students shall acquire a basic, comprehensive and in-depth understanding of all branches of the discipline of Economics. The course work will help them in acquiring desirable outcomes in graduate examinations, pursue higher academic degrees, enhance their preparedness for appearing in competitive examinations, get them ready as future teachers and equip them as professionals in accounting, insurance, finance, marketing and management and such others, both in the national as well as in the international arena. Students shall acquire skills needed to conduct research studies relevant and beneficial in the contemporary world. In fact, the way the course work is structured, will certainly go a long way to impart sufficient skills and information which will enhance students' employability, make them environmentally conscious and responsible citizens and help them to become important contributors to national wealth and prestige.

Prospects and Career Options

The University of Kalyani Undergraduate Economics Honours Program under CBCS is the right option for students who are interested in understanding economics, the motive and understanding behind each economic policy, the functioning of different economic strategies, and various economic principlesand allied fields of economics. There are various academic and career options.

- Pursuing higher studies (post-graduate) in Economics, Applied Economics, and allied subjects (like Foreign Trade, Quantitative Economics, Labour Economics and other fields of Social Science) indifferent reputed universities all over India and abroad.

- Pursuing higher studies in Management and Actuarial Science Jobs in schools, colleges and Universities after acquiring additional higher degreequalifications.
- Job prospects as economist, consultant, analyst in the growing Bankingand Insurance Sector.
- Prospect of being absorbed in Actuarial business is particularly bright forstudents in the discipline of Economics with Mathematics.
- Jobs in Indian Economic Services and State Government Servicesthrough success in competitive examinations.
- Jobs and engagement in Rural Development and Public Policy.
- Students with a flair for writing in English/Bengali may choose careers inJournalism particularly in the field of socio-political issues in print and electronic media.

Course Outcomes of Economics Generic Elective

Semester-wise break-up of Generic Elective for students having Honours in subjects other than Economics

Semester I	Generic Elective Course I (GE-I)	Code: (ECON-H-GE-T-01)
Semester II	Generic Elective Course II (GE-II)	Code: : (ECON-H-GE-T-02)
Semester III	Generic Elective Course III (GE-III)	Code: (ECON-H-GE-T-3A) OR Code: (ECON-H-GE-T-3B)
Semester IV	Generic Elective Course IV (GE-IV)	Code: (ECON-H-GE-T-4A) OR Code: (ECON-H-GE-T-4B)

Course: ECON—H-GE-T-1
Course title: Introductory Microeconomics

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

In this course, students will understand the fundamentals of microeconomic theory. They will get the basic idea about -

- the scope and methods of economics, the economic themes, decision making, principles of economic interactions -trade off, thinking like an economist: the question of what to produce, how to produce and how to distribute output; marginal benefits and marginal costs; opportunity cost (private and social); the basic competitive model.
- reading and working with graphs
- workings of the market - demand and supply, market and adjustments, market sensitivity, Elasticity concepts and government intervention.
- The consumption decision – budget constraint, consumption and income and price changes, demand for all other goods and price changes; description of preferences – most preferred bundle and its properties; consumers' optimum choice.

- Defining a firm – firm's legal forms; profit maximization hypothesis, Technology- general concept of production function; returns to factor and returns to scale, isoquants and diminishing rate of factor substitution – elasticity of substitution. short run and long run costs; cost curves in the short run and long run; relation between short run and long run costs.

Course: ECON-H-GE-T-02

Course Title: Introductory Macroeconomics

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

In this course, students will understand the fundamentals of macroeconomic theory. They will get the basic idea about -

- Circular flow of income, closed and open economy .Macroeconomic data- National Income accounting and cost of living; Concept of Growth- role of savings, investment,; Open Economy-; Concept of unemployment- Types and their characteristics.
- Simple Keynesian System: Multipliers; equilibrium in both closed and open economy and stability; autonomous expenditure, balanced budget, and net exports; paradox of thrift.
  IS-LM Model – concept of equilibrium.

- Monetary system- definition and functions of money and determinants of money supply; inflation and its costs.

Course: ECON-H-GE-T-3A

Course Title: Intermediate Microeconomics – I

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to understand the fundamentals of microeconomic theories in the context of a market economy.
They will get the basic idea about-

- Cardinal utility; Preference; ordering and properties of ordinal utility; existence of utility functions, different utility functions and their properties, compensating and equivalent variation, Slutsky equation; consumption-leisure choice and labour supply; choice under uncertainty (expected utility and risk aversion), inter-temporal choice and savings decision; revealed preference approach.

- Technology – general concept of production function; returns to factor and returns to scale, isoquants and diminishing rate of factor substitution – elasticity of substitution – some examples of technology (fixed proportion, perfect substitute, Cobb-Douglas Production Function, CES Production Function), General concept of homogeneous and homothetic production function and their properties; production with one and more variable inputs; isocost line and firm's equilibrium and expansion paths; short run and long run costs; cost curves in the short run and long run: relationbetween short run and long run costs.
- Short run and long run equilibrium; determination of the supply curve of the firm and the industry: with reference to external economies and diseconomies of scale.

- Derived demand for input, marginal product and marginal revenue product, input demand for competitive firm and competitive industry, returns to scale and product exhaustion.

Course: ECON-H-GE-T-3B
Course Title: Intermediate Macroeconomics – I
Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After the completion of the course the students will be able to understand the fundamental macroeconomic theories in the context of a market economy. They will get the basic idea about-

- IS-LM Model - equilibrium, stability and comparative statics; effects of fiscal andmonetary policies, real balance effects.
- Derivation of aggregate demand assuming price flexibility; Derivation of aggregatesupply curves both in the presence and absence of wage rigidity; equilibrium, stability, and comparative statics-effects of monetary and fiscal policies; Unemployment and its causes- possible solutions, including real balance effect and wage cut policy.
- Know about inflation, Types and cost of Inflation. Inflation and unemployment trade-off-Short run and long- run Phillips curve under adaptive expectations-outcome under rational expectations (non-rigorous).

Economics Core Course 8: ECON-H-GE-T-4A
Course Title: Intermediate Microeconomics – II
Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to learn the fundamentals of microeconomic theories. They will get the idea about-

- Exchange Economy, Consumption Allocation and Pareto Optimality; Edgeworth box and contract curve; Equilibrium and efficiency under pure exchange.
- Pareto efficiency with production: concepts of PPF, SIC, and resource allocation;
- Perfect competition, Pareto efficiency and market failure (externalities and public good); property right and Coase Theorem.

- Monopoly; pricing with market power; degree of monopoly; price discrimination-different degrees; multiplant monopoly; peak-load pricing; two-part tariff; monopolistic competition.
- Oligopoly; Non collusive. (Cournot Equilibrium, Bertrand Equilibrium, Stackelberg Equilibrium, Kinked Demand Curve) ; concept of collusion and cartels.
- Monopsony, bilateral monopoly in labour market; Externalities; public goods and markets with asymmetric information.

Economics Core Course 9: ECON-H-GE-T-4B

Course Title: Intermediate Macroeconomics – II

Total Marks: 75 [Written: 60+ Internal Assessment: 10+Attendance: 05]

After completion of the course the students will be able to learn the fundamentals of macroeconomic theories. They will get the idea about-

- Classical System: Say's law and quantity theory; Classical dichotomy and neutrality of money; Keynesian vs classical system.
- Consumption: Keynesian consumption function; Fisher's theory of optimal intertemporal choice; life-cycle and permanent income hypotheses; Dusenberry's relative income hypothesis;
  Investment: MEC and MEI- Acceleration principle- fixed and variable.
  Demand for money: Regressive expectations and Tobin's portfolio choice models;
  Baumol's inventory theoretic money demand.
- Government debt and Ricardian equivalence; high-powered money; money multiplier analysis; monetary policy – OMO, Bank rate, variable reserve ratio, repo and reverse repo.
- Harrod- Domar model and Solow one sector growth model; golden rule; dynamicefficiency, technological progress.