

A MINORITY RUN COLLEGE AFFILIATED TO UNIVERSITY OF CALCUTTA RECOGNISED UNDER SECTION 2(F) & 12(B) OF THE UGC ACT, 1956

## **Programme Specific Outcomes (PSO)**

### **Economics (Honours) 2018-19**

- 1. Acquiring valuable knowledge on of the basic tenets of Economics that affect the socio-economic lives of every citizen of any nation.
- 2. Increasing employability prospects both at the corporate and/or academic levels.
- **3.** Acquiring knowledge to undertake research in the future
- 4. Making students equipped to undertake multi-disciplinary courses and projects in the future

# **Programme Outcome (PO)**

# **Economics (Honours) 2018-19**

|     | Program Outcome                            | Description  |
|-----|--|--|
| PO1 | Domain Knowledge                           | Have a clear and comprehensive understanding of the basic concepts and fundamental principles of the subject. Simultaneously they should also be able to logically and empirically process the various theoretical frameworks. |
|     | <b>Method of Measurement:</b>              | Assessment (Internal & Final)  |
| PO2 | Critical Thinking                          | Engage in rational, objective and independent thinking so as to identify, define and logically evaluate ideas; solve problems systematically and detect inconsistencies in arguments.  |
|     | Method of Measurement:                     | Assessment (Internal & Final)  |
| PO3 | Communication Skills                       | Clearly, succinctly and successfully deliver, receive and disseminate knowledge/ concepts - oral, written or otherwise.  |
|     | Method of Measurement:                     | Regular Communication Activity Internal Assessment   |
| PO4 | Spirit of Enquiry and Lifelong<br>Learning | Have a curious and open mind, willing to attend to and/or accept new or differentiated ideas.  |
|     | Method of Measurement:                     | Internal Assessment  |



| PO5 | Spirit of Research and Innovation | Have a scientific temper that would inculcate a spirit of research and enquiry which are fundamental for future policy initiatives and social growth.                |
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|     | <b>Method of Measurement:</b>     | Assessment (Dissertation)  |
| PO6 | Social Concerns and Ethics        | Take a normative i.e. a value-based approach to various social conditions and situations, such that scientific objectivity and research finds a social acceptability |
|     | Method of Measurement:            | Regular Teacher-Student Interactive Sessions   |
| PO7 | Environment and Sustainability    | Access to scientific information that is a prerequisite for increased environmental awareness and knowledge of sustainable development.                              |
|     | <b>Method of Measurement:</b>     | Regular Teacher-Student Interactive Sessions   |



| SUB: ECONOMICS (Honours)   | 2018-2019  |
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| PAPER  | COURSE OUTCOME (CO)  |
| SEMESTER I   |  |
| PAPER CORE COURSE I  |  |
| INTRODUCTORY MICROECONOMICS<br>(ECOA-CC-1-1-Th-Tu)   |  |
| <b>Unit One: Exploring the subject matter of Economics</b>   |  |
| Scope & Method of Economics, Principles of Microeconomics, Interdependence & Gains from Trade, Reading and working with graphs                     | 1.1. Acquiring knowledge to think in the economic way.                             |
| UnitTwo: Demand and Supply: How Markets Work   |  |
| Elementary theory of Demand, Elementary theory of Supply, Elementary theory of Market Price,   | 1.2. Acquiring knowledge of markets and welfare                                    |
| Unit Three: Market & Adjustments   |  |
| The evolution of Market economies, The Decision Takers, The Concepts of Markets, Different goods   | 1.3. Acquiring clear knowledge of Market and Adjustments                           |
| Unit Four: Market Sensitivity & Elasticity   |  |
| Importance of elasticity in Choice decisions, Method of Calculation, Demand and Supply elasticities, Income & Cross Price elasticity, Applications | 1.4. Understanding Market<br>Sensitivity and Elasticity                            |
| Unit Five: Government Intervention   |  |
| The economic role of government with respect to market,<br>Comparison of markets with or without government  | 1.5. Critically 4analyzing the economic role of Government with respect to markets |
| Unit Six: Utilitarian Approach   |  |



| The history of Utility theory, Utility in Cardinal Approach,<br>Ordinal Utility, Consumers equilibrium and demand curves   | 1.6. Acquiring knowledge of Utilitarian Approach   |
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| PAPER CORE COURSE II   |  |
| MATHEMATICAL METHODS IN ECONOMICS – I<br>(ECOA-CC-1-2-Th-Tu)   |  |
| Unit One: Preliminaries  |  |
| Sets & set operations, Convex sets and Functions, Limit & Continuity, Uses of the Concept of Continuity  | 2.1. Acquiring knowledge on the various concepts and tools of mathematics applicable to economic analysis                  |
| Unit Two: Functions of one real variable   |  |
| Continuous functions of different types and their graphs,<br>Concept of Derivatives, Applications in Economics - concepts<br>of elasticity; marginal and average functions                                       | 2.2. Acquiring knowledge on single variable functions and how to functionally establish basic economic principles and laws |
| Unit Three: Single Variable Optimization   |  |
| Local & global optima, Interpretation of necessary and sufficient conditions, Applications in Economics - optimization of profits and cost   | 2.3. Acquiring knowledge on optimization and their economic application  |
| Unit Four: Integration of Functions  |  |
| Integration of different types of functions, Method of substitutions and integration by parts, Applications in Economics - obtaining total from marginal   | 2.4. Acquiring knowledge on integral algebra and their economic application  |
| Unit Five: Matrix Algebra  |  |
| Matrix, Rank of a Matrix, Determinants and inverse of a square matrix, Solution of a system of linear equations, System of non-linear equations, The concept of comparative statics, Application in I-O analysis | 2.5. Acquiring knowledge on matrix algebra and how to empirically interpret microeconomics and macroeconomics principles   |
| Unit Six: Game Theory  |  |
| Concept of games, strategies, payoffs, Zero sum games,<br>Dominant strategy equilibrium, Nash equilibrium, Nash<br>equilibrium in context of some common games   | 2.6. Acquiring knowledge on game theory  |



| SEMESTER II   |   |
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| PAPER CORE COURSE III   |   |
| INTRODUCTORY MACROECONOMICS<br>(ECOA-CC-2-3-Th-Tu)  |   |
| Unit One: National Income Accounting  |   |
| Macroeconomic data- Basic concepts of National Income accounting. The circular flow, Concepts of GNP, GDP, NNP, and NDP at market price and at factor cost, Measurement of National Income-Value Added Method and Expenditure Method. The problem of double counting, Role of Government. Concepts of Corporate Income, Corporate Savings, Personal Income, Personal Disposable Income and Personal Savings, Saving-Investment gap and its relation with budget deficit and trade surplus, National Income accounting and cost of living. Basic idea of India's national income   | 3.1. Learning the basic economics behind the functioning of a nation and the world                                  |
| Unit Two: Simple Keynesian Model in a Closed Economy  |   |
| The Simple Keynesian Model (SKM) in a Closed Economy without Government- the Keynesian Consumption Function; the Keynesian Saving Function; income determination in SKM; stability of equilibrium; the concept of effective demand- the concept of demand-determined output; The Simple Keynesian Multiplier; paradox of thrift; the SKM in a Closed Economy with Government; government expenditure and tax; the government expenditure multiplier and the tax rate multiplier; the balanced budget multiplier; the budget surplus; effects of tax changes and government purchases on budget surplus; the full employment budget surplus. | 3.2. Acquiring knowledge on the determination of the basic macroeconomic indicators in a demand-constrained economy |
| Unit Three: The Classical System  |   |
| Basic ideas of Classical Macroeconomics, Say's Law and<br>Quantity Theory of Money, Loanable fund theory, The<br>Classical Theory of Income and Employment determination,<br>Full Employment and wage-price flexibility, Classical<br>Dichotomy and Neutrality of Money   | 3.3. Developing ideas about policymaking  |

| Unit Four: Macroeconomic Foundations I  |   |
|---|---|
| The bond market as the mirror image of the money market-the Walras Law. Relationship between bond price and rate of interest- the concept of Keynesian liquidity preference schedule-speculative demand for money and liquidity trap, Investment function: Concepts of Marginal productivity of capital, marginal efficiency of capital (MEC) and marginal efficiency of investment (MEI)- Jorgenson's neo-classical theory- Acceleration principle- fixed and variable. Multiplier-accelerator interaction | 3.4. Acquiring knowledge on the macroeconomic foundation  |
| PAPER CORE COURSE IV  |   |
| MATHEMATICAL METHODS IN ECONOMICS – II<br>(ECOA-CC-2-4-Th-Tu)   |   |
| Unit One: Functions of several variables  |   |
| Continuous & differentiable functions, Euler's theorem, Implicit function theorem, Economic Applications  | 4.1. Acquiring knowledge on the various concepts and tools of mathematics applicable to economic analysis                                     |
| Unit Two: Multi-variable Optimization   |   |
| Optimization of non-linear functions, Constrained optimization with equality constraints, Inequality constraints, Value function and Envelope theorem, Optimization of Linear Functions, LPP and Applications   | 4.2. Acquiring knowledge on the methods of analyzing and interpreting economic theories and concepts with the help of mathematical techniques |
| <b>Unit Three: Difference Equations</b>   |   |
| Finite Difference, Economic Application   | 4.3. Developing quantitative analytical in algebra skills necessary for future research   |
| Unit Four: Differential Equations   |   |
| Solution of Differential Equation, Economic Application,<br>Qualitative Graphic Solution  | 4.4. Developing quantitative analytical skills in algebra necessary for future research   |



| SEMESTER III  |   |
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| PAPER CORE COURSE V   |   |
| INTERMEDIATE MICROECONOMICS – I<br>(ECOA-CC-3-5-Th-Tu)  |   |
| Unit One: Theories of Consumer Behaviour and Applications   |   |
| Inter-temporal choice (saving and borrowing), Revealed<br>Preference, Choice under Uncertainty, Application of Consumer<br>Behaviour in Construction of Price Indices                     | 5.1 Acquiring advanced knowledge<br>on Theories of Consumer Behaviour<br>and Applications   |
| Unit Two: Production and Costs  |   |
| Technology, Types of Production Function, Cost Structure  | 5.2 Acquiring knowledge on the concepts and applications of the theories of Production and Costs  |
| Unit Three: The Firm and Perfect Market Structure   |   |
| Organisation, Firms and Profit Maximisation, Marginal<br>Revenue, Marginal Cost and Profit Maximisation, Perfect<br>Competition, Consumer and Producer Surplus, Welfare and<br>efficiency | 5.3 Developing the ability to understand different market structures and to focus on Perfectly Competitive Market and consequences of Government Intervention |
| <b>Unit Four: Input Market in Perfect Competition</b>   |   |
| Basic Concepts, Marginal Productivity theory of distribution,<br>Labour Market, Land Markets and rent   | 5.4 Acquiring knowledge on the Factor markets in the presence of Perfect Competition  |
| PAPER CORE COURSE VI  |   |
| INTERMEDIATE MACROECONOMICS – I<br>(ECOA-CC-3-6-Th-Tu)  |   |
| Unit One: Income Determination in the Short-run (Part-II) : The IS-LM Model   |   |
| IS-LM Model - equilibrium, stability and comparative statics,<br>Crowding out, Effects of fiscal and monetary policies  | 6.1. Acquiring advanced knowledge on the determination of the basic   |

|   | macroeconomic indicators in a demand-constrained economy  |
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| Unit Two: Aggregate Demand and Aggregate Supply- the<br>Complete Keynesian Model  |   |
| Derivation of aggregate demand curve, Derivation of aggregate supply curves both in the presence and absence of wage rigidity, Equilibrium, stability, and comparative statics-effects of monetary and fiscal policies. Effects of wage cut, Unemployment equilibrium and its causes- possible solutions including real balance effect  | 6.2. Acquiring knowledge on the complete modelling of an underemployment economy  |
| Unit Three: Keynes vs. Classics   |   |
| Keynesian vs classical system, Hybrid models under<br>Classical/Keynesian framework, Friedman's restatement of<br>classical ideas   | 6.3. Developing the ability to distinguish between the modeling of an underemployment economy and a full-employment economy |
| Unit Four: Money Supply, Monetary Policy and Government Budgetary Operations  |   |
| Measures of money supply with special reference to India (M1,M2, M3 and M4) Balance sheet view of money supplied by the banking sector as a whole,High powered money – definition; Balance sheet of Reserve Bank of India and High powered money; Balance sheet of Commercial banks and basic ideas of money multiplier theory, Deposit multiplier, currency multiplier, reserve multiplier, credit multiplier and money multiplier in the context of the theory of money supply, Interest sensitivity of money supply and the slope of the LM curve, Monetary policy – Open Market Operations, Statutory Liquidity Ratio, Bank rate, variable reserve ratio, repo rate, Government Budget Deficit and Deficit Financing-Indian illustration. Deficit financing and monetary policy | 6.4. Acquiring knowledge on the fundamental concepts of money supply and its control  |
| Unit Five: Inflation, Unemployment and Expectations   |   |
| The concept of Inflationary Gap; Demand pull vs. Cost push inflation; Mark-up inflation; The concept of stagflation, Central Bank's role in controlling inflation: Monetary policy; Inflation and unemployment trade-off, Four models of aggregate supply: The Sticky-Wage Model, The Worker-Misperception Model, The Imperfect Information Model and The Sticky-Price Model, Deriving the Phillips Curve from Aggregate Supply Curve; Short run and long- run Phillips curve – role of adaptive  | 6.5 Acquiring knowledge on the concepts, measurements and modelling of inflation and unemployment                           |



| expectations and rational expectations, Disinflation, Sacrifice Ratio and policy ineffectiveness  |  |
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| PAPER CORE COURSE VII   |  |
| STATISTICAL METHODS FOR ECONOMICS<br>(ECOA-CC-3-7-Th-Tu)  |  |
| Unit One: Introduction and Overview   |  |
| Subject Matter - Distinction between Population & Sample,<br>Representation of data - Graphical & Tabular Methods,<br>Frequency Distribution  | 7.1. Acquiring knowledge about the basics of Statistics and its application in Economics |
| Unit Two: Descriptive Statistics  |  |
| Measures of Central tendency, Dispersion, Moments, Skewness and Kurtosis, Correlation & Regression  | 7.2. Acquiring knowledge of different measures of descriptivestatistics                  |
| Unit Three: Elementary Probability Theory   |  |
| Sample spaces and events, Axiomatic definition and properties,<br>Theorem of Total Probability, Conditional Probability, Theorem<br>of Compound Probability, Bayes' Theorem & its application                                   | 7.3. Acquiring clear knowledge of basic elements of probability                          |
| Unit Four: Probability Distributions  |  |
| Random variables - discrete & continuous, Probability distributions –p.m.f.& pdf, Expectation - mean, variance, moments, m.g.f., Binomial, Poisson & Normal distributions, Joint distribution functions - discrete & continuous | 7.4. Understanding Probability Distributions of discrete and continuous type             |
| Unit Five: Sampling   |  |
| Principle steps in sample survey - population, sample, parameter, statistic; Methods of Sampling - SRSWR, SRSWOR, Stratified, Multi-stage; Sampling distribution of sample mean and proportion                                  | 7.5. Acquiring knowledge of the different methods of sampling and its applications       |
| Unit Six: Statistical Inference   |  |
| Point estimation, Basic principles of OLS, MLE, Method of Moments, Interval Estimation, Testing of Hypothesis - null,   | 7.6. Critically analyzing the basic concepts of estimation and statistical               |



| alternative, Type I, Type II, p value  | inference  |
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| PAPER SKILL ENHANCEMENT COURSE I (GR. A)   |  |
| DATA ANALYSIS<br>(ECOA-SEC-3-1A-Th)  |  |
| Unit One: Collection & Representation of Data  |  |
| Collection of data - some methodological issues (Census, sample survey), Representation of data, The basics of data management in Stata/ R   | SEC-A.1 Learning about data collection and representation, and using a statistical software  |
| <b>Unit Two: Indian Official Statistics (Basic Concepts)</b>   |  |
| Central Statistical Offices - NAS, ASI, IIP, National Sample<br>Survey Office (NSSO), Census of India - Population census<br>2011, RBI - Handbook of Statistics on Indian Economy  | SEC-A.2 Gaining knowledge on official data sources in India, their collection methodology and using such data                            |
| RURAL DEVELOPMENT<br>(ECOA-SEC-3-1A-Th)  |  |
| Unit One: Aspects of Rural Development   |  |
| Concept of Rural Development, Rural Development vs. Agricultural Development, Role of NGOs in Rural Development, Rural Non-Farm Sector and Rural Development   | SEC-A.3 Acquiring knowledge on<br>the various concepts of rural<br>development, agricultural<br>development and rural non-farm<br>sector |
| Unit Two: Panchayats and Rural Development   |  |
| Decentralized Planning and Participatory Development, Role of<br>Panchayats in Decentralized Rural Development, Participatory<br>Rural Appraisal, Panchayats and Rural Development in West<br>Bengal   | SEC-A.4 Acquiring knowledge and analyzing the role of Panchayats in rural development  |
| Unit Three: Rural Credit and Self-Help Groups(SHGs)  |  |
| Role National Bank for Agriculture and Rural Development (NABARD) for promoting Rural, Constraints of microenterprises in rural areas, Credit needs for rural non-farm sector, the concept of Micro credit; Micro credit and the role of Grameen Bank, Need for SHG for formation and features of SHG, SHGs in India | SEC-A.5 Acquiring knowledge and analyzing the role of rural credit and self-help groups for promoting rural development                  |

| Unit Four: Critical Evaluation of Selected Government   |  |
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| Programmes and Rural Development  |  |
| Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and RuralDevelopment, Child labour and school drop-out in rural areas. Mid-day Meal and Rural Development, National Rural Health Mission (NRHM) and Rural Development, Pradhan Mantri Gram Sadak Yojana (PMGSY) and Rural Development  | SEC-A.6 Critically evaluating the Government programs on rural development |
| PART II   |  |
| PAPER III A   |  |
| MICROECONOMICS  |  |
| Unit One: Consumer Theory   |  |
| Assumptions on preference ordering, indifference curve, marginal rate of substitution and convexity of IC, budget constraint, consumers' equilibrium — interior and corner, Derivation of Demand Curves from ICs, composite good convention. Application: Cash subsidy versus subsidy in kind; Income and price consumption curves Price effect — substitution effect (Hicks and Slutsky), inferior goods and Giffen goods, income effect, ordinary and compensated demand curves; Intertemporal choice (saving and borrowing); Revealed preference; Choice under uncertainty- utility function and expected utility, risk aversion and risk preference (concepts only) | 3A.1 Acquiring sound knowledge of consumer theory                          |
| Unit Two: Production and Costs  |  |
| Technology, Production Functions and Isoquants, short run and long run, production with one and two variable inputs, total average and marginal products, law of diminishing return, marginal rate of technical substitution, elasticity of substitution, economics of scale; Types of production functions- Cobb-Douglas, fixed-coefficient and CES functions; Cost structure-implicit cost, explicit cost, accounting cost, sunk cost, economic cost, fixed cost, variable cost, total, average and marginal cost. Determinants of Short run cost, Cost Curves, cost minimization and expansion path, Short run versus long run cost curves, economies of scope.      | 3A.2 Acquiring knowledge of production and cost                            |
| Unit Three: Market Structure  |  |
| Organization, Firms and Profit Maximization; Marginal Revenue, Marginal Cost and Profit Maximization; Perfect   | 3A.3 Understanding different forms   |

| competition- short run competitive equilibrium of the firm, short run supply curve of firm and industry, Output choice and competitive equilibrium in long run, Economic rent and profit, long-run industry supply— constant, increasing and decreasing cost; Efficiency of competitive equilibrium, Government intervention and dead weight loss, Application — Minimum prices and price supports; Monopoly and barriers to entry—output determination and price rule, measure and sources of monopoly power, social costs of monopoly power—deadweight loss; Pricing with market power—first, second and third degree price discrimination; Monopolistic competition—short run and long run equilibrium, excess Capacity; Oligopoly—Oligopoly equilibrium as Nash equilibrium, Cournot and Stackelberg Model, Competition versus collusion—the Prisoners' Dilemma. | of commodity markets  |
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| Unit Four: Input Market  |   |
| Basic concepts-derived demand, productivity of an input, marginal product of an input, marginal revenue product; Marginal productivity theory of distribution; Labor market-supply of labor, competitive labor markets, monopsony, collective bargaining; Land markets and rent.   | 3A.4 Understanding the input market                         |
| Unit Five: Other Issues Related to Market  |   |
| General Equilibrium and Economic Efficiency – Exchange, production and welfare; Reasons for Market Failure; Markets with asymmetric information- adverse selection, moral hazards, agency problems (concepts only).  | 3A.5 Understanding the reasons for market failure.          |
| PAPER III B  |   |
| MACROECONOMICS   |   |
| Unit One: The Economy in the Long Run  |   |
| The classical analysis of the real sector-determination of employment, income and interest rate; Job Loss, Job finding and Natural Rate of Unemployment; Money and Inflation – quantity theory of money, seigniorage and inflation tax,inflation and interest rates, nominal interest rate and demand for money.   | 3B.1 Acquiring knowledge long run models of macroeconomics. |
| Unit Two: The Economy in the short run   |   |
| Simple Keynesian analysis of aggregate demand without and with the   | 3B.2 Acquiring knowledge on short                           |

| government sector, multiplier; IS-LM, fiscal and monetary policy; IS-LM and Aggregate Demand; Aggregate supply – Sticky Wage Model and Imperfect Information Model, Aggregate Supply and Phillips curve, Inflation and Unemployment trade off without and with rational expectations; Economy wide equilibrium with fiscal and monetary policy, demand and supply shocks, wage price flexibility and rigidity (only definition), Keynesian aggregate supply and Classical Aggregate Supply.  | run models of macroeconomics.   |
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| Unit Three: Foreign Trade and Exchange Rate  |   |
| Economic Openness with an emphasis on Indian economy, balance of payments, BOP and the Central Bank, Financing Current Account Deficit; Exchange Rate Concepts, Determination of Exchange Rate – fixed and flexible, Importance of Foreign Currency Reserves with reference to India, Domestic Adjustment, BOP Crisis and Speculative Attack, Internal and External Balance under Fixed Rate, Advantages of Flexible exchange and Fixed Rates; Foreign exchange market reform in India, relation of Devaluation with purchasing power parity and inflation, purchasing power parity principle; IS-LM model without capital flows, Open economy with capital flows – the Mundell-Fleming Model. | 3B.3 Developing skills to devise appropriate policies at the macroeconomic level.                 |
| <b>Unit Four: Theories of Consumption and Investment</b>   |   |
| Consumption – Keynes and consumption function, intertemporal choice, life cycle and permanent income hypothesis; Investment—business fixed investment, neo-classical approach, Tobin's q, Residential investment and accelerator model of inventories.   | 3B.4 Acquiring knowledge on human economic behavior at the macro level                            |
| Unit Five: Demand for Money  |   |
| Demand for money: Portfolio theory of money demand,<br>Baumol-Tobin analysis of cash management.   | 3B.5 Acquiring knowledge on money demand behaviour  |
| Unit Six: Economic Growth  |   |
| Solow model, Golden Rule of capital, impact of changes in saving propensity, population growth and technological progress. Growth accounting and Solow residual; Endogenous Growth Theory (introduction).  | 3B.6 Critically assessing the impact of various policies undertaken in the economy and worldwide. |
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| DEVELOPMENT THEORY   |  |
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| Unit One: Concepts & Nature of Development   |  |
| Nature, Questions & Values of Development, Development vs. economic growth, Capabilities approach, Objectives of development; Purchasing power parity & Per capita income as an index of development, HDI; Definition & characteristics of a developing economy.   | 4A.1 Acquiring knowledge on applying economic concepts to real time development strategies |
| Unit Two: Process of Development – Theoretical perspective   |  |
| Theories of transition – Clark and Fisher on change in sectoral share,Rostow's stages of growth, Kuznets's characteristics of growth, Industrialisation, Kaldor's growth laws; Neo-classical approach of market & growth   | 4A.2 Understanding economic transitions  |
| Unit Three: Factors in Economic Development  |  |
| Land: Ownership and tenancy system – fixed rent contract & share cropping, role of agriculture, barriers to agricultural development & land reforms; Labour – Population & labor force growth, casual & long term labor, permanent labor market; Capital: Role of capital accumulation in development. Capital-output ratio, role of technology & technological progress, learning, human capital. | 4A.3 Understanding and analysing resource allocation                                       |
| Unit Four: Population & Development  |  |
| Concepts of population: definitions of fertility, mortality, birth rates, death rates, fertility rate, life expectancy, infant mortality rate, youth dependency ratio; Theory of demographic transition  | 4A.4 Acquiring knowledge on demographic transitions  |
| Unit Five: Development Strategies  |  |
| Complementarity & Coordination; Nurkse's Poverty Trap & Big Push theory of Rosenstein-Rodan; Linkages – backward and forward; linkages, policy & big push; Choice of technology & choice of scale, criteria for investment; Gains from Trade – static, dynamic and vent for surplus, tariffs versussubsidies. Prebisch doctrine, Prebisch-Singer thesis & Terms of Trade                           | 4A.5 Understanding, analysing and interpreting socio-economic policies                     |
| Unit Six: Development in a Labour Surplus Economy  |  |
| Economic dualism; Lewis' model, Disguised unemployment; Informal Sector; Harris-Todaro model   | 4A.6 Acquiring knowledge on economic interpretation of dualism                             |
| Unit Seven: Development, Inequality & Poverty  |  |

| Meaning & measures of inequality, Lorenz curve, range, coefficient of variation, Gini coefficient, Kuznet's Inverted U hypothesis; Poverty, relative & absolute deprivation with respect to income, Poverty line, Poverty measures – Head count ratio, Poverty gap ratio, Income gap ratio, Human Poverty Index; Social dimensions of poverty – rural poverty, women, ethnic minorities, indigenous populations; Tackling Poverty – The World Bank Approach   | 4A.7 Understanding, analysing and interpreting socio-economic policies and concepts regarding poverty, economic inequality, empowerment and justice, etc.                 |
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| Unit Eight: Environment & Development   |   |
| Development & Environment: overview; Sustainable development & environment accounting, population & resources, poverty, rural development, urban development, global environment – rain forest destruction & greenhouse gases; Environmental regulation policies.   | 4A.8 Acquiring knowledge on sustainable development   |
| PAPER IV B  |   |
| INDIAN ECONOMY SINCE INDEPENDENCE   |   |
| Unit One: Indian Economy at the time of independence  |   |
| Features of Indian Economy around 1947-1950 & characteristics of economic underdevelopment of India (with reference to colonial rule of India)  | 4B.1 Acquiring knowledge on the impact of colonial economics on modern India  |
| Unit Two: Planning  |   |
| Background and Structure of Indian Planning; Structural Constraints and India's development strategy: Choice ofindustrialization – public vs. private sector, capital goods vs. consumer goods – Mahalanobis Plan Model, import substitution vs. export promotion strategy; Agriculture-industry relationship – demand side & supply side linkages, agriculture industry terms of trade – food crisis of the 1960s & imperatives for agricultural growth, genesis of green revolution – fourth plan; Poverty Eradication, foreign aid and self-reliance – Fifth Five Year Plan; Regional inequality in India – causes; policies for balanced regionalDevelopment; Planning deficiencies and its abandonment – 7 <sup>th</sup> five-year plan and Indian economic crisis; New Economic Policy – liberalisation, market and state | 4B.2 Analysing the intersectoral linkages of the different sectors of the economy and the thrust areas of Indian planning and possible outcomes of the Planning exercise. |
| Unit Three: Land & Agriculture  |   |
| Land & tenancy system, sharecropping, Different dimensions of land reform, productivity debate, Marketable Surplus; Green   | 4B.3 Understanding, analysing and interpreting the effects of economic  |

| Revolution – features and impacts, Performance of Indian agriculture; Agricultural Policies and Pricing, Agricultural Price commission, support price vs. procurement price, Public investment in Agriculture, agricultural subsidies and tax.   | policies on the Indian economy since<br>Independence   |
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| Unit Four: Industrial Development  |  |
| Structure and composition of Industry, issues of concentration, large vs. small industry, industrial location. Small scale reservation policy. Trends and patterns of industrial growth; Foreign trade regime, protection and foreign competition, productivity, import substitution vs. Export competitiveness, effect on export competitiveness; Industrial Policies – industrial licensing system | 4B.4 Critically analysing the development strategies and economic policies of the Indian Government since Independence |
| Unit Five: Employment, Wages and Inflation   |  |
| Trends and pattern of employment and wages, informalisation and tertiarisation of employment, problems of unemployment and under-employment; Government policies on employment and wages, employment guarantee scheme, minimum wage; Movement of prices in India – trends, patterns, causes, consequences and policies adopted   | 4B.5 Critically analysing the development strategies and economic policies on important macro parameters               |
| PART III   |  |
| PAPER VA   |  |
| INTERNATIONAL ECONOMICS  |  |
| Unit One: Basic Models of Trade  |  |
| Ricardian Model: Comparative advantage; One factor economy: production possibility frontier, relative demand and relative supply and autarkic terms of trade; Trade in Ricardian world: determination of international terms of trade, complete specialization, gains from trade.  | 5A.1 Understanding basic models of trade   |
| Unit Two: Resources, Comparative Advantage and Income Distribution   |  |
| Model of two factor economy: Assumptions, Factor prices and commodity prices (Stolper-Samuelson effect)-correspondence, Resources & output, Rybzynski effect; Effects of International Trade between two factor economies, Relative prices and the pattern of Trade, Trade and distribution of Income, Factor Price Equalization; Empirical studies – Leontief Paradox.                              | 5A.2 Acquiring knowledge of<br>Resources, Comparative Advantage,<br>and Income Distribution                            |
| Unit Three: The Standard Trade Model   |  |

| Production Possibilities and relative supply, relative prices and demand, welfare effects of changes in terms of trade, determining relative prices; Economic growth: shift of RS curve, growth and production possibility frontier, RS and terms of trade, International effects of growth, International transfers of income: shifting RD curve, Transfer problem, effects of transfer on terms of trade, Tariffs and export subsidies; Offer curves: Derivation, International Equilibrium. | 5A.3 Acquiring knowledge on the standard trade model and trade policy                                |
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| Unit Four: Trade Policy  |  |
| Partial equilibrium analysis: Tariff- cost and benefit, effective rate of protection and intermediate goods, quota, tariff- quota equivalence and nonequivalence, export subsidy, voluntary; Export restraint; General Equilibrium Analysis: Distinction between small and large openeconomy, welfare effects of tariff in a small country, optimum tariff for largeopen economy, Metzler's paradox; Tariff & Import Quotas in presence of monopoly.   | 5A.4 Obtaining sound knowledge of accounting, income determination and exchange rates                |
| Unit Five: Accounting, Income Determination and Exchange Rates   |  |
| Balance of payment accounts; national income accounting in an open economy; monetary account; Determination of national Income, multiplier analysis, the transfer problem, introduction of foreign country and repercussion effect; Fixed and Flexible Exchange rates: Adjustments, Demand & Supply of foreign exchange, Effects of exchange rate changes on domestic prices and terms of trade, Marshall-Lerner condition, J-curve effect   | 5A.5 Obtaining knowledge on BoP, accounting, exchange rates  |
| PAPER VB   |  |
| PUBLIC FINANCE   |  |
| Unit One: Introduction to public economics   |  |
| The nature, scope and significance of public economics   | 5B.1 Acquiring basic knowledge on public economics   |
| <b>Unit Two: Forms and Functions of Government</b>   |  |
| Different forms of government – unitary and federal. Tiers of government in the federal form- Central, State, Local (Introductory discussion with examples); Functions of Government – Economic functions –allocation, distribution and stabilization; Regulatory functions of the Government and its economic significance  | 5B.2 Acquiring clear knowledge & idea about the functioning of the government and the public sector. |

| Unit Three: Federal Finance  |  |
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| Federal Finance: Different layers of the government, Inter governmental transfer—horizontal vs. vertical equity; Grants—merits and demerits of various types of grants—unconditional vs. conditional grants, tied grants, matching grants.   | 5B.3 Acquiring knowledge on resource allocation in a federal structure   |
| Unit Four: Public Goods and Public Sector  |  |
| Concept of public goods—characteristics of public goods, national vs. local public goods, determination of provision of public good; Externality, concept of social versus private costs and benefits, merit goods, club goods; Provision versus production of public goods. Market failure and public provision. Pricing of public goods—vertical summation | 5B.4 Acquiring knowledge on the different economic aspects of the operations of the public sector  |
| <b>Unit Five: Government Budget and Policy</b>   |  |
| Government budget and its structure – Receipts and expenditure – concepts of current and capital account, balanced, surplus, and deficit budgets, concept ofbudget deficit vs. fiscal deficit, functional classification of budget. Concept of Revenue Deficit; Budget, government policy and its impact. Budget multipliers                                 | 5B.5. Critically examining the impact of various policies by the government  |
| Unit Six: Revenue Resources  |  |
| Concept of tax, types of tax – direct tax and indirect tax, canons of taxation, subsidy, transfer policy; Principles of taxation – Ability to Pay principle (brief discussion), Benefit Approach (Actual Examples); Tax Design – introduction – truth seeking mechanism.   | 5B.6 Developing the skills to apply<br>the ideas of microeconomics and<br>macroeconomics on real life<br>situations and hence devise<br>appropriate policies |
| Unit Seven: Tax Structure  |  |
| Effects of income tax on work effort, saving and risk bearing (just brief ideas); Excess burden of indirect taxes; VAT, Goods and Services Tax (pros and cons); Non-tax revenue resources-earnings from public undertakings, interest on loans.  | 5B.7 Acquiring knowledge on government revenue   |
| <b>Unit Eight: Distribution and Stabilization</b>  |  |
| Instruments for stabilization; Public Debtinternal and external; Public Finance and Public Choice: The Role of State.  | 5B.8 Acquiring knowledge on stabilization and distribution instruments   |



| PAPER VI A  |   |
|---|---|
| COMPARATIVE DEVELOPMENT EXPERIENCE  |   |
| Unit One: International comparisons of development  |   |
| Differences in initial conditions of development of less developed countries and present day developed countries; Nature of development gap prevailing at present between developed and less-developed countries  | 6A.1 Acquiring knowledge on economic development  |
| Unit Two: Genesis of capitalism   |   |
| Different types of social organization, feudalism, pre-capitalist societies other than feudalism, capitalism in the West, development of the Third World; Industrial revolution in Great Britain – Causes – Why Great Britain became the pioneer? – Characteristics – Effects   | 6A.2 Acquiring knowledge on capitalism  |
| Unit Three: Industrialization Experiences in Early Part of 20 <sup>th</sup> Century   |   |
| The Great Debate in Soviet Union on the assignment of priority on development of heavy industry in the process of planned economic development; The Great Depression of the 1930's and recovery – Experiences of USA and Great Britain.   | 6A.3 Learning economic history  |
| Unit Four: Post Second World War Development Scenario   |   |
| Global Change, Welfare state and mixed economy; Post War global institutions: International Monetary Fund, World Bank, United Nations Conference on Trade and Development; Trade and Strategies of Development: Infant industry, Import substitution versus export promotion in less developed countries. Illustrations from South Asia, Latin America and East Asia; Foreign Finance, Investment and Development: Private foreign direct investment and Multinational Corporations, private portfolio investment, development assistance debate. | 6A. 4 Acquiring the competence to assess foreign repercussions on domestic economy      |
| Unit Five: Development and Underdevelopment as  |   |
| Historical Process  Dependency Approach, Unequal exchange   | 6A.5 Learning economic history  |
| Unit Six: Evolution of New International Economic Order   |   |
| Neo liberalism, Washington consensus, North-South Divide, Recasting of IMF and World Bank; General Agreements on Tariff and Trade (GATT) and the Dunkel Draftcontroversy-World Trade Organization (WTO); Economic Integration and   | 6A.6 Analyzing the working of the various international institutions and global players |

| Regional Trading Blocks; Global Polarization  |   |
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| <b>Unit Seven: Development Policies and role of the State</b>   |   |
| Nature of Development planning, Rationale for development planning. Washington Consensus, New Consensus and the State   | 6A.7 Learning development planning  |
| Unit Eight: Some Recent Development Experiences   |   |
| i) China, (ii) Africa (iii) Argentina   | 6A.8 Comparing the development scenario of countries and underlying reasons for the disparity among nations |
| PAPER VI B  |   |
| CONTEMPORARY ECONOMIC ISSUES: INDIA & WEST BENGAL   |   |
| Unit One: Economic Reform in India Since 1991   |   |
| Background of Indian Economic Reforms – New Economic Policy.  Redefining India's development strategy. Changing Role of State and Market; Industrial Policy, Disinvestment policy and Privatization; Financial sector reforms including banking reform. Monetary Policy of RBI; Fiscal Policy Reform – tax reform, debt management, FRBM act and subsidies; External sector reforms: Foreign Exchange market, balance of payments, reform, convertibility, export-import policy, foreign direct investment. | 6B.1 Acquiring knowledge on New<br>Economic Policy of India   |
| Unit Two: Agriculture, Poverty and Social Security  |   |
| Post-reform Agricultural Performance and its Crisis; Poverty and exclusion, NREGA, social security for unorganized workers and forest policy.   | 6B.2 Acquiring knowledge on various development policies in India   |
| Unit Three: Post-reform performance of Indian Economy   |   |
| Appraisal of Indian Economic Reform. India's Growth Experience  Unit Four: Indian economy: Some Current and Future Issues   | 6B.3 Critically analyzing the NEP   |
| Inclusive development; Growth of the Service Sector; Food security, Food Procurement and Public Distribution System;  | 6B.4 Acquiring knowhow as to whether sustainable development  |



| Migration and Urbanization; Land acquisition, SEZ and Industrialization; Demographic dividend.   | tenets are operational at the state and national policy design, implementation and operation levels.                    |
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| Unit Five: West Bengal Economy: An Overview  |   |
| West Bengal Economy Structure and Growth – based on state domestic product (SDP) data and employment data from National Sample Survey and Census of India; West Bengal Economy in relation to India and major states in recent decades: in terms of indicators on – per capita SDP, per capita consumption (rural and urban), income growth, human development.  Unit Six: Growth and Development of West Bengal | 6B.5 Acquiring insight into how economic concepts actually operate through development policies undertaken by the State |
| Economy  |   |
| Land Reforms, agricultural growth and related current problems- growth of non-farm rural sector; Industrial development – problems and prospects; Tertiary sector growth –Informalisation in manufacturing and tertiary sectors; Poverty alleviation, Employment generation, self-help-group and social security: Problems and policies  | 6B.6 Acquiring knowledge about the West Bengal economy  |
| PAPER VII A  |   |
| STATISTICS AND BASIC ECONOMETRICS  |   |
| Unit One: Joint Probability Distribution   |   |
| Idea of Independence, Marginal & ConditionalDistribution. Expectation of the product of two variates.  | 7A.1 Acquiring knowledge on statistical theory  |
| Unit Two: Sampling Theory  |   |
| Population and Sample, Parameter and Statistic, SRSWR & SRSWOR, Random sampling Numbers; Sampling Distribution, Standard Error.  | 7A.2 Acquiring knowledge sampling theory  |
| Unit Three: Sampling Distribution  |   |
| Normal Population, Expectation & Standard Error of Sample Mean for SRSWR & SRSWOR; Chi-Square distribution, Student t distribution, F-distribution, degrees of freedom.  | 7A.3 Acquiring knowledge on statistical theory  |
| Unit Four: Classical Statistical Inference   |   |
| Estimator properties: Unbiasedness, MinimumVariance, Consistency & Sufficiency; Point Estimation – MLE &   | 7A. 4 Acquiring knowledge on  |

| properties; MLE estimation of the parameters of Binomial, Poisson & Normal Distributions. Confidence Intervals, Testing of Hypothesis, p-Values, Type-I and Type –II Errors; Simple applications of tests for the Mean and Variance of a Univariate Normal Population.   | statistical inference and how to<br>statistically establish and test existing<br>theoretical models                  |
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| <b>Unit Five: Elementary Econometrics</b>  |  |
| Classical Linear Regression Model: Specification, assumptions, Linearity in variables & parameters, Estimation of the Error Variance; Gauss Markov Theorem, Goodness of fit: R square; Inference in the Linear Regression Model- Confidence interval for parameters & the Testing of Hypotheses Prediction with SimpleRegression model; Heteroscadasticity& Autocorrelation  | 7A.5 Acquiring knowledge econometrics and on how to generate quantitative frameworks for theoretical economic models |
| Unit Six: Time Series  |  |
| Components: Secular Trend (Free hand curve fitting, moving averages, fitting mathematical curves), Seasonalfluctuation (monthly averages, ratio to moving averages, ratio to trend)  | 7A.6 Acquiring knowledge on time series  |
| PAPER VII B  |  |
| APPLIED ECONOMICS (MATHEMATICAL ECONOMICS)   |  |
| Unit One: Theory of the Consumer   |  |
| Utility maximization, Lagrangian multiplier, Indirect Utility function, Roy's Identity, Derivation of Slutsky's equation, Slutsky's Equation in elasticity form, Compensated demand curve, Different forms of Utility Function—Separable, quasilinear, homogeneous &Homothetic Labour-leisure choice   | 7B.1 Acquiring knowledge on how to mathematically establish basic economic principles and laws                       |
| Unit Two: Theory of the Firm   |  |
| Output maximization, Cost minimization, Homogeneous & homothetic production functions, Elasticity of substitution, CES production function, Relationship between AC & MC; Factor demand curves, output elasticity, Analysis of firms in competitive equilibrium & monopoly, imposition of taxes; Analysis of factor demands in the long run; Fixed coefficient production functions, Leontief Input-Output system. | 7B.2 Acquiring knowledge on how to empirically interpret microeconomics and macroeconomics principles                |
| <b>Unit Three: Games &amp; Decisions</b>   |  |
| 2-person matrix games, solving matrix games with mixed strategies; Sequential Games & Decisions  | 7B.3 Acquiring knowledge on game theory  |



| Unit Four: Inter-temporal Choice Theory   |   |
|---|---|
| n-period utility maximization, Time preference, Stocks & flows  | 7B.4 Acquiring knowledge on inter-<br>temporal choice theory  |
| Unit Five: Behaviour under Uncertainty  |   |
| Uncertainty and Probability, State preference approach for preferences; Expected Utility Hypothesis, Risk aversion & its measures.  | 7B.5 Acquiring knowledge on uncertainty theory  |
| Unit Six: Comparative Statics   |   |
| Generalisation to n variables: First and Second order conditions; Profit maximisation: n factors and Utility Maximisation; National Income Model, IS-LM Model; Simple Trade Models  | 7B.6 Acquiring knowledge on how to mathematically establish basic economic principles and laws  |
| Unit Seven: Comparative Statics   |   |
| Cobweb Model; Multiplier-Accelerator Interaction Model; Linear Systems via Eigen values; Solution of linear systems by substitution; Phase diagrams of linear systems; Solow model. | 7B.7 Acquiring knowledge on how to empirically interpret macroeconomics principles  |
| PAPER VIII A  |   |
| INDIAN ECONOMIC HISTORY   |   |
| Unit One: Economic condition in India on the eve of British rule  |   |
| Economic condition in India on the eve of British rule  | 8A.1 Acquiring knowledge on the economic conditions of India at the time of British rule  |
| Unit Two: Aspects of Economic Policies under in British India   |   |
| Land policy; Policy of Discriminating Protection; Early Industrial Development and Managing Agency System; Currency and monetary policy; Infrastructure and Transport               | 8A.2 Understating and analyzing the effect of economic policy on the core sectors of agriculture, industry and trade in British India |
| Unit Three: Impact of British rule on India   |   |
| De-industrialization, Commercialization of agriculture;<br>Economic Drain   | 8A.3. Acquiring knowledge on the impact of colonialism on the   |



|  | economy  |
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| Unit Four: Early Economic planning initiatives during British rule   |  |
| Early Economic planning initiatives during British rule  | 8A.4 Critically analyzing the economic planning initiates during the British rule  |
| PAPER VIII B   |  |
| TERM PAPER   |  |
| <b>Term Paper:</b> The topic of the term paper will be from the subjects covered in the undergraduate economics honours syllabus | 8B.1 Learning to carry out research and write dissertation papers by applying theoretical knowledge and tools to real life situations. |



| Economics (Honours) 2018-19                       |  |           |             |              |           |          |           |  |  |
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