| | Corporate Accounting: Issue, Forfeiture & Re-issue of Shares, Redemption of Preference Shares & Debentures, Buy-back of Shares, Company Final Accounts, Reconstruction of Companies, Preparation of Consolidated Balance Sheet. | | | |
|--------------------|--|--|--|--|
| | Cost & Management Accounting: Cost Concepts, Terms & Classification of Costs, Elements of Cost, Accounting for Material, Employee Cost and Overhead, Job costing, Process costing, Activity-based costing, Marginal Costing – CVP Analysis & Decision Making, Standard Costing, Budgetary Control, Funds flow & Cash Flow Statement, Accounting Ratios. | | | |
| | Taxation: a) Income Tax – Definitions, Residential Status & Incidence of Tax of Individual, Computation of Total Income of an individual (various heads of income and deduction from Gross Total Income), Set off & Carry Forward. | | | |
| | b) Indirect Tax i) WB VAT Act, 2003: Basic concepts, features, determination of tax payable, registration of dealer. ii) Central Sales Tax, 1956: Definition, incidence and levy of tax, exemption and exclusion, determination of turn over and tax payable, registration of dealer. | | | |
| Paper – II : | <u>Indian Financial System</u> – Role of finance in an economy, components (instruments, markets, etc.), role of financial intermediaries, structure of Indian financial system, role of RBI, Commercial Banks and other Financial Institutions(LICI,UTI, SIDBI, SFCs, NABARD) | | | |
| | Money Market – structure of Indian money market, discount houses, call money market, recent trends of Indian money market | | | |
| | Capital Market – primary and secondary market, functionaries of stock-exchanges, concept of DMAT, role of SEBI. | | | |
| | Business Lawsi) Indian Contract Act, 1872 – Offer & Acceptance, Consideration, capacity of parties, free consent, void& voidable agreements, discharge of contracts. | | | |
| | ii) Consumer Protection Act, 1986 – Rights of consumers; definition of consumer, manufacturer, complaints, unfair trade practices; composition and jurisdiction of District Forum, State Commission and National Commission. | | | |
| | iii) Companies Act, 1956 – Types of companies, Memorandum and Articles of Association, Prospectus, Promotion and Incorporation of Companies, Directors, Company Meeting, Winding up. | | | |
| | iv) Industrial Disputes Act, 1947 - Nature, Causes, and settlement of industrial disputes, workers' participation in management and collective bargaining. | | | |
| | <u>Auditing</u> – Auditing procedures and techniques; internal control and internal audit; company audit – divisible profit, dividend and depreciation; Audit of Bank, Insurance and NGOs; Audit Report. | | | |
| | <u>Organisation Behaviour</u> – Nature and Concept of Organisation; organisation structure; modern concepts of organisation theory; Leadership – theories and styles; Motivation – concept & theories; Quality of Work Life – meaning and impact. | | | |
| COMPUTER SCIENCE : | | | | |
| Paper – I : | Algorithms and Problem solving : Number systems and Arithmetic : Theory of Counting : Graphs and Algorithms : Boolean Algebra : Models of Computer Machines : Numerical Algorithms : Operations Research : Circuit and Network Theory : Basic Electronics : Instruments : Digital Logic and Systems : Data Communication : Data Structure. | | | |
| Paper – II : | Operating System : System Analysis and Design : Object oriented Programming, Computer Architecture and Organization : Micro Processor : Computer Networks : Database Management : Assembler, Loader and Linker : Compiler : Graphics and Multimedia. | | | |
| ECONOMICS : | | | | |
| Paper – I : | Microeconomic Theory Macroeconomic Theory International Trade Theory Public Finance Statistics and Econometrics | | | |
| | Microeconomic Theory i. Consumer Theory ii. Production and cost- returns to scale, short run and long run costs iii. Market Structure-Perfect competition, Monopoly, Monopolistic Competition, Oligopoly iv. General Equilibrium and Welfare (optimality of perfect competition) v. Marginal Productivity Theory of Distribution | | | |

| - | 2. | Macroeconomic Theory |
|--------------|----|---|
| | | i. National Income Accounting |
| | | ii. Economy in the long run, economy in the short run, Fiscal and Monetary policy using |
| | | IS-LM, Growth Theory—Harrod-Domar Model, Solow Model, Endogenous Growth. |
| | | , , , , , , , , |
| | 3. | International Trade Theory |
| | | i. Classical — Ricardo, Neoclassical – Hecksher- Ohlin |
| | | ii. Imperfect competition and trade . Intra-industry trade |
| | | iii Trade Policy—Tariff Quota |
| | | iv Current and Canital Account in Balance of Payments. Fixed and Elevible exchange rate |
| | | everence |
| | | A A A A A A A A A A A A A A A A A A A |
| | | v. Open economy macroeconomics — Munden-Fleming model |
| | | Public Einanco |
| | | <u>Fublic Finance</u> |
| | | a. Theory of externality and market failure |
| | | D. Public Goods and Role of the Public Sector |
| | | c. Budget – Different concepts |
| | | d. Tax—indirect and direct, VAT, subsidy and transfers |
| | | e. Public debt and its burden |
| | | |
| | 5. | Statistics & Econometrics |
| | | 1. Measures of Central Tendency & Dispersion |
| | | 2. Theory of Probability |
| | | 3. Sampling Theory |
| | | 4. Inference |
| | | 5. Econometrics—Classical Linear Regression Model |
| Paper – II : | | Development |
| | | The Indian Economy |
| | | (a) Pre-independence period |
| | | (b) Post-independence pre-liberalisation period |
| | | (c) Post-liberalisation period |
| | | (d) The West Bengal Economy |
| | | <u>Development</u> |
| | | (a) Process of development |
| | | Lewis Model |
| | | Harris Todaro Model |
| | | Demographic change and occupational transformation |
| | | (b) Trade and Development |
| | | Trade as an engine of growth |
| | | (c) Planning vs. Market Model of Development |
| | | Poverty and Inequality |
| | | (d) Capability and Human Development including issues of Gender |
| | | (e) Environment and development |
| | | |
| | | The Indian Economy |
| | | (a) Dra independence |
| | | (a) Fre-independence |
| | | Commercialization of agriculture |
| | | Deindustrialisation |
| | | Drain Theory |
| | | Dividenment of Indian Pailways |
| | | Development of Indian Ranways |
| | | (h) Post-independence |
| | | Dianning models and experience till Seventh Plan |
| | | Change in composition of national income_Agriculture Inductor & Sonvices |
| | | Agriculture, Green Devolution |
| | | Industry-Pole of Public Sector |
| | | Industry - Role of Fublic Sector |
| | | (c) Post-Liberalisation |
| | | Changing role of Planning (from centralised to indicative participatory and |
| | | decentralised planning (|
| | | Salient features of NEP |
| | | Progress in Reforms -1^{st} and 2^{nd} generation Reforms |
| | | Role of WTO & IMF |
| | | Monetary and Fiscal Policies |
| | | Poverty and inequality |
| | | (d) The West Bengal Economy-A historical perspective |
| | | i. Brief economic history of the colonial period. |
| | | ii. Economic & demographic consequences of Partition |
| | 1 | |

| | iii. Evolution of Land and Tenancy Reforms (1950-1980) and its economic consequence |
|----------------|---|
| | iv. Changing composition of SDP |
| | v. Social development indicators-health, education, environment |
| ELECTRICAL ENG | VI. West Bengal: In relation to other major States of India. |
| Paper – I : | Electrical Circuits and Network : |
| | Circuit components, network graphs, KCL, KVL. |
| | Circuit analysis methods : nodal analysis/mesh analysis, basic network theorems and applications. |
| | Transient analysis : RL, RC and RLC circuits. |
| | Sinusoidal steady state analysis, resonant circuits and applications. |
| | Coupled circuits and applications. |
| | Balanced 3-phase circuits. |
| | Two-port networks. |
| | Signals & Systems : |
| | Representation of continuous-time and discrete-time signals & systems, Analysis of signals & systems by Laplace Transform and Z-Transform, Poles & Zeroes, Fourier Transform, Sampling and Reconstruction of Signals, analysis of discrete time signals by DFT and FFT. |
| | Field Theory : |
| | Electric Field : Gauss's Integral Law, Electric Dipole Fields, Electric Polarisation and its relation to the Permittivity of Di-electric media. Gauss's Law in differential form. Poisson's and Laplace Equations in different co-ordinates. Energy stored in Electric Field. |
| | Magnetic Field : Ampere's Law and Biot-Savart's Law, Faraday's Law of Electromagnetic Induction, Self & Mutual Inductance, Energy in Magnetic Field, Force due to Magnetic Field. |
| | Maxwell's equations, Wave propagation in bounded media. Boundary Conditions. Reflection and Refraction of Plane Waves, Distributed Parameter circuits. |
| | Analog & Digital Electronics : |
| | Characteristics and equivalent circuits (large and small-signal) of Diode, BJT, JFET and MOSFET. |
| | Diode circuits : Clipping, clamping and rectifiers. |
| | Biasing and bias stability of BJT. |
| | Amplifiers : Single and multi-stage, differential, operational, feed-back and power. |
| | OPAMP circuits, Active Filters. |
| | Sinusoidal oscillators : transistor and OPAMP configurations. |
| | Function generators and wave-shaping circuits. |
| | Boolean algebra; minimization of Boolean functions; logic gates. |
| | Digital IC families (TTL,MOS,CMOS). |
| | Combinational circuits : Arithmetic circuits, code converters, multi plexers and decoders. |
| | Sequential circuits : latches and flip-flops, counters and shift-registers. |
| | Comparators, timers, multivibrators. |
| | Sample and hold circuits, ADCs and DACs. |
| | Semiconductor memories. |
| | Logic implementation using MUX / DMUX and programmable devices (ROM, PLA, FPGA). |
| | Measurement and Instrumentation : |
| | Error analysis, measurement of current, voltage, power, energy, power-factor, resistance, |