

SYLLABUS

FOUNDATION COURSE

Paper 1: Organisation and Management Fundamentals (One Paper: 3 hours: 100 marks)

Section I: Organisation (30 marks)

- (i) **Functional areas of organisation** — different organisation structures, operations of main functional areas of business, the organisation and the activities of different functions. Formal and informal organisation – principles of organisation, criteria for grouping activities.

Schools of organisation theory — classical, behavioural and systems, current trends and approaches, behaviour in organisation, role of behavioural science.

Organisational management — objectives (missions, goals and targets), conflict between the objectives; appropriate strategy formulation; the determinants of culture – the different models available for categorising cultures; different models of organisational management available to achieve goal congruence.

Section II — Management (70 marks)

- (i) **Human resource management** — human resource plan; the human issues relating to recruitment, dismissal, retirement and redundancy. Models of human behaviour and motivation and their application (e.g. Taylor, McGregor, Maslow, Herzberg, etc); training, development and design of reward system.

- (ii) **Management of relationship** — process of management covering planning, organising, staffing, directing, motivating, communicating and control; the concepts of power, authority, responsibility and delegation; the characteristics of leaders and managers; management style theories, contingency approach.

Theories of group development, behaviour and roles. The sources of conflict in organisations and the ways in which the conflict can be managed.

- (iii) **Management of change** — The stages in the process of management change, approaches to the management of organisational development and major cultural and structural change; the importance of managing critical period of change and the ways in which these periods can be managed effectively.

- (iv) **Pattern of management** — broad policies and functions, structural pattern of the Board of Directors; concept of public sector, social objectives; public sector management. Current management thoughts.

Paper 2: Financial Accounting Fundamentals (One Paper: 3 hours: 100 marks)

- (i) **Basics of bookkeeping and accounting** — definition and its usefulness. Financial accounting principles, concepts and convention – measurement of business income. Position Statement. Accounting Standards – national and international (basic knowledge).

System of book keeping — double entry system, books of prime entry, subsidiary books, recording of cash and bank transactions, preparation of ledger accounts, preparation of trial balance - interpretation and usefulness.

Bank reconciliation statement — Need for reconciliation between cashbook and bank pass book and problems relating to the preparation of bank reconciliation statement.

Accounting mechanics (including computerisation.), bill of exchanges, consignment and joint venture.

(i)Concept of capital, revenue and deferred revenue expenditure, opening entries, closing entries, adjustment entries and rectification entries, trading, manufacturing and profit and loss account and balance sheet. Bad debts and reserves for bad debts – its accounting treatment. Depreciation – its significance and accounting.

(ii)Concept of single entry vis-à-vis double entry system of accounting, their interrelationship and conversion from single entry system to double entry system. Preparation of receipts and payments accounts and income and expenditure account. Significance of reserves and provisions. Preparation of profit and loss account and balance sheet of different organisations.

(iv)**Partnership Accounts** —Admission, Retirement, Death, Dissolution.

(v)**Joint stock company accounts** — issue, forfeiture and redemption of preference shares and debentures, profits prior to incorporation and company profit and loss account and balance sheet as per provision of the Companies Act, 1956 (1 of 1956).

Paper 3: Economics and Business Fundamental (One Paper: 3 hours: 100 marks)

Section I — Economics (50 marks)

(i)**Basics of economics** — definition, scope and subject matter of economics – a few fundamental concepts like utility, wealth, factors of production, demand and supply, elasticity, equilibrium, land and the laws of diminishing returns.

Theory of employment — types of unemployment, concepts of full employment and how it can be achieved.

Labour and population theories, definition of capital and growth of capital, steps in capital formation.

Market forms — value under perfect competition and under imperfect competition.

National Income — Gross National Product, Net National Product, measurement of national income, economic growth and fluctuations, consumption, savings and Investments.

Distribution — income determination and equilibrium relating to rent, wages, interest and profit.

(ii)**Money** — definition and functions of money, quantity theory of money, inflation, effects of inflation on production and distribution of wealth, control of inflation, money supply, liquidity preference and managerial efficiency, rate of interest and investment.

Banking — definition, functions and utility of banking, the principles of commercial banking, multiple credit creation, essentials of a sound banking system.

Central bank — Functions, weapons of credit control and the money market.

International trade — basic features of import–export.

(iii) **National and International Financial Institutions** — Industrial Finance Corporation of India (IFCI), Industrial Credit and Investment Corporation of India (ICICI), Industrial Development Bank of India (IDBI), Export-Import Bank (EXIM), Asian Development Bank, International Monetary Fund, International Bank for Reconstruction and Development (World Bank).

Public finance — direct and indirect taxes, principles of taxation, effects of taxation on production and distribution, taxable capacity, deficit financing systems.

Section II: Business Fundamentals (50 marks)

(i) **Types of business units** — sole proprietorship, partnership, companies, co-operatives, Hindu Undivided Family, joint stock companies, public utility services and state enterprises.

Company organisation and management — types of companies – their formation, incorporation and commencement of business, memorandum of association and articles of association, prospectus, shares and debentures, Board of directors and general meetings.

(ii) **Business objectives** — concept and rationale of social responsibility, business and its environment, interface with legal, political, economic, social and cultural aspects.

Stock exchange and its workings — dealers and brokers' transactions, economic significance, conditions of membership, role of stock exchanges.

Business communication and report writing — commercial correspondence and report writing.

Paper 4: Business Mathematics and Statistics Fundamentals (One Paper: 3 hours: 100 marks)

Aim: To ensure a basic understanding a quantitative tool and their elementary application of business problems.

Level of knowledge: Basic knowledge.

Arithmetic (15 marks)

Average, mixtures, computation of interest, discounting of bills, percentages, ratios and proportions.

Algebra (25 marks)

- (i) Number systems – real, imaginary, rational and irrational.
- (ii) Elementary knowledge of sets and the operations on them. Simple applications and solution by the use of Venn diagram. Truth table and its applications to statements.
- (iii) Indices and surds, variation, logarithms, permutations and combinations, compound interest.
- (iv) Solution and systems of linear simultaneous equations (3 variables only). Quadratic equations, solution of linear inequalities (by geometrical method only).

Mensuration (30 marks)

Area and perimeter of triangles, circles, parallelogram, regular polygon, volume and surface of cube, prism, cylinder, pyramid, cone, frustums and spheres (including zone and segments). Plain Co-ordinate Geometry (Rectangular Cartesian co-ordinates only). Length of line segments, section ratio, gradient of a line, equations of straight lines, circles, parabolas, Ellipse and hyperbolas (standard forms only).

Elementary Statistics (30 marks)

Graphical presentation of statistical data, frequency distribution, measures of central tendency (mean, median, mode) measures of dispersion (range, mean deviation, standard deviation, variance), measures of skewness and kurtosis.

INTERMEDIATE COURSE

STAGE - I

Paper 5: Cost and Management Accounting (One Paper: 3 hours: 100 marks)

(i) ***Basics of cost and management accounting:*** Evolution of cost accounting and management accounting, cost concepts and cost object, cost classification, cost organisation and its relationship with other departments. Elements of cost and cost determination: Material cost – purchase procedure, store keeping and stock control, pricing issue of material and accounting thereof, perpetual inventory and physical stock taking, identification of slow, non-moving and fast moving items, ABC analysis, JIT system, level of inventories and economic order quantity, analysis, investigation and corrective steps for treatment of stock discrepancies – control through other means.

Labour costs — remuneration methods, monetary and non-monetary incentive schemes, payroll procedures, labour analysis and idle time, measurement of labour efficiency and productivity, analysis of non-productive time and its cost, labour turnover and remedial measures, treatment of idle time and overtime.

Direct expenses — nature, collection, classification and treatment of direct expenses.

(ii) ***Overheads*** — nature, collection and classification.

Production overheads — collection, apportionment, absorption, use of predetermined recovery rates, treatment of under and over absorption, fixed, variable and semi variable overhead, report for control of overhead cost.

Administration, selling and distribution overheads — analysis, accounting and control, treatment of miscellaneous items in cost accounting.

Preparation of Cost Sheet

(iii) ***Methods of costing***

Specific order costing — job, batch and contract, determination of cost accounting in job, batch and contract, valuation of work-in-progress in job costing, features of contract costing, certification of work done, profit on incomplete contracts, cost plus contracts.

Process costing — treatment of normal and abnormal losses and gains, valuation of work-in-progress using first-in – first-out and average methods (equivalent production), inter-process transfer and pricing, concepts and accounting for joint products, by-products, waste, scrap, spoilage and defectives, research and development expenses.

Service or operating costing — unit costing and multiple costing, application, identification of cost unit and cost determination and control.

Cost accounting records — cost ledgers, reconciliation of cost and financial accounts; integrated accounts, basis of computerisation of accounts.

(iv) **Marginal costing and break-even analysis** — basic concepts, marginal costing and absorption costing, cost-volume-profit analysis, break-even analysis, limitations of break-even analysis, differential cost analysis and relevant cost analysis, applications for management decision making (simple types).

(v) **Budgetary control** — basic concepts, functional budgets and master budgets, flexible budgets.

(vi) **Standard costing** — concepts/uses and setting of standard cost accounting methods, computation of simple cost variances; relationship of standard costing and budgetary control, possible reasons for variation in costs.

(vii) Uniform costing, Interfirm comparison, cost reduction, value analysis/engineering including value management.

(viii) Cash Flow and Fund Flow Analysis

(xi) Financial Analysis and Control

Paper 6: Information Systems and Technology (One Paper: 3 hours: 100 marks)

(i) **Basics of Information systems and technology** — various types of Information Technology hardware and software in common use. The different hardware and applications architectures (e.g. centralised, distributed, client server) available and the IT required operating them (e.g. PCs, servers, networks, peripherals). Concepts of General System's theory and their application of Information Systems. Designing data and information architectures to assist and improve planning decision, making and control. Use of information for decision making at the various levels of the organisation and the components of the Information Systems, which can support those decisions (i.e. transaction processing systems, management information system, D.S.S., executive information systems and other expert systems). Systems evaluation and the stages in the systems development life cycle. Systems testing – off-line, on-line and user-acceptance. System changeover methods. Cost benefit analysis of I.T. investment. Basics of Cyber Laws

(ii) **Strategic information management** — Information requirements of different organisations and at different levels of Cost-management benefit analysis for assessing value of information. Different methods of data collection. Electronic commerce and its impact on the business strategy. Knowledge management as key element. Use of data bases and planning modules in strategic planning process e.g. external database, economic models, forecasting and modelling packages / application. Strategy of information development and management on organisation structure.

(iii) **Need of an IS/IT** as complementary to the organisation strategy. Impact of IT upon an industry by utilising frameworks such as Porter's five forces and value chain. The strategic business use of the Internet and www in terms of marketing and sales activities.

Business integration — between strategy, people, technology and operations in determining role of IS/IT. Role of IT in innovation and Business Process Engineering.

Planning and implementation of IS/IT strategies — the purpose and content IS, IT and IM strategies.

The social and organisational impact of IS/IT - the human information processor and the implications of providing a user friendly interface to gain maximum benefits while minimising the potential drawbacks; the growing awareness of remote working; the management of change and potential staff reactions.

(iv) **Audit** — the process of review and audit of internal control. The major tools available to assist with such a review (e.g. audit planning, documenting systems, internal control questionnaires, sampling and testing). Internal auditor v. external auditor. Techniques available to assist audit in a computerised environment. Safety of data, evaluation of system to avoid fraud.

(v) **Computer Applications of Management Accounting & Strategic Management** — Particular Focus: Use of ERP and relational data base management system (like ORACLE). 2. Specific Application System Programmes to be chosen by the Institute every year for detailed study. Other application systems emerging from time to time to be included for general study.

Paper 7: Business Laws and Communication Skill (One Paper: 3 hours: 100 marks)

Section I — Business Laws (70 marks)

(i) **Indian legal system** — The judiciary system – Supreme Court, High Courts and other subordinate courts.

(ii) **Essentials of Contract Act** — valid, void and voidable contracts, quasi contracts, bailment, conditions and warranties, breach of contract, damages.

Main provisions of Sale of Goods Act.

General concepts of Negotiable Instruments Act.

(iii) **Partnership Act** — salient features, position of minors, implied authority, dissolution.

(iv) **The Companies Act, 1956** — definition, fundamental matters relating to formation, promoters' function, fundamental matters and general framework of documents, meetings and proceedings; management of company operations, winding up; meetings and proceedings, mismanagement and arrangements, shares and debentures, borrowing of a company, accounts and audit, appointment and powers and duties of an auditor, cost accounting records and cost audit, auditor's report and explanation, preparation and presentation of accounts of government companies and statutory corporations. Corporate laws as amended from time to time.

(v) General concepts and objects of:

Foreign Exchange Management Act, MRTP Act, Competition related Laws

Payment of Bonus Act, Payment of Gratuity Act

Consumer Protection Act; Air, Water and Noise Pollution Act Industrial Development & Regulation Act, Industrial Dispute Act and current legislations

Section II — Communication Skill (30 marks)

Letter writing, report writing, drafting, and business communication. Letter writing, Report writing drafting and business communication: Including personnel matters like issue of show cause notice, charge sheets, letter of dismissal, discharge and other punishment; sales matter like preparation of market survey report, drafting of advertisements etc.; financial matters like correspondence with banks regarding overdraft, cash credit,

account current, Insurance companies regarding settlement of claims, Post & Telegram authorities regarding concessional rate of Postage etc; Inter departmental communication like internal memos, Office Circular, office cards etc; preparation of Press releases.

Paper 8: Business Taxation (One Paper: 3 hours: 100 marks)

Section I — Direct Tax (50 marks)

(i) **Direct Tax laws** — A comprehensive study of the Income-tax Act, 1961; Wealth-tax Act, case laws governing capital and revenue expenditure, deemed income, residence concept.

Special problems centering on the concept of assessee, registered firm, Hindu Undivided Family, Companies, Association of persons and trust, minors, cooperatives, non-resident Indians and avoidance of double taxation.

(ii) **Problems covering heads of income** — Salaries, perquisites, gratuity and retirement benefits, income from house property, capital gains, income from other sources, income from business and profession, problems arising from aggregation of income and set off and carry forward of losses. Computation of income and Return of Income Tax, Filing procedure

Tax audit

Tax administration — appeals, revisions, review, rectification and application to Central Board of Direct Taxes.

Acquisition proceedings — principles of valuation of movable and immovable property.

Tax incentives and export promotion, deductions under Chapter VI, other benefits and tax exemptions.

Section II — Indirect Tax (50 marks)

(i) Indirect Tax Laws, administration and relevant procedures: —

- (a) The Central Excise including Central Value Added Tax (CENVAT);
- (b) The Central Sales Tax Act, 1956 (74 of 1956);
- (c) The Customs Act, 1962 (52 of 1962); and
- (d) Excise audit.

(ii) Assessment of Tax payable by the Assessee under Indirect Taxes

(iii) Powers of different authorities

(iv) Impact of tax on GATT 94, WTO, Anti Dumping processing

(v) Tariff Commission and other Tariff authorities.

STAGE — II

Paper 9: Management Accounting - Performance Management (One Paper: 3 hours: 100 marks)

(i) General principles of management, management of change, pattern of management.

(ii) Business of performance measurement and performance development e.g. Financial (ROI, RI, EPS, NPV etc.) and non-financial e.g. Balanced Scorecard. Performance appraisal in Public Sector Enterprise

(iii) **Standard costing** — setting of standards, accounting under standard costing, costs and sales variances, reconciliation of standard costs and profits with actual; interpretation and investigation of variances – interrelationship, significance; planning and operational variances; benchmarking, behavioural aspects in budgeting and standard costing.

(iv) **Budgeting** — planning, functional and master budgets, time series and regression; "what if" analysis, controllable and uncontrollable costs, responsibility budgeting – cost, profit and investment centres and divisional performance measurement, residual income; fixed and flexible budgeting, rolling budgets; performance, programming and zero-based budgeting, activity-based budgeting. Report to Management with suggested actions on deviations.

Principles of transfer pricing, transfer pricing systems — cost / standard costs, cost / standard cost plus, market price, market price less savings.

(v) **Allocation of resources** — resource planning systems – MRP I, MRP II and ERP; just in time, activity-based costing, cost reduction, value analysis, total quality management.

Single, dual limiting factors for resource allocation, linear programming, transportation. Queuing and simulation problems.

Multi-product CVP analysis including break-even, profit target, margin of safety, P/V ratio, break-even charts, profit-volume graphs.

Paper 10: Advanced Financial Accounting (One Paper: 3 hours: 100 marks)

(i) **Basics of Accounting principles, concepts and conventions** — measurement of business income; in-depth study of accounting standards - national and international; US GAAP; valuation of enterprise, valuation of inventories, goodwill and shares, buy back of shares.

(ii) **Preparation of company accounts** — amalgamation, absorption, reconstruction and capital reduction, holding companies, mergers, de-mergers, joint ventures and associates. Amalgamation of firms, Conversion of firms into company

Branch and departmental accounts – leasing, hire purchase and instalment payments; royalty accounts - contract accounts; investment accounts.

Preparation of accounts from incomplete records - self-balancing ledger.

(iii) **Accounting Services in other organisations** — farm accounting, hotel accounting; accounting for non-profit making organisations, e.g. accounting for hospital and educational organisations, accounting for local self-government – rural and urban.

Accounting for bank and insurance companies – accounting for loss of stock, loss of profit and other compensations including marine insurance claims – Electricity Company accounts, Software accounting as per IAS 2,7 and 9

(iv) **Government accounting in India** — general principles, comparison with commercial accounting; role of the Comptroller and Auditor General of India and public accounts committee – review of accounts.

Paper 11: Auditing (One Paper: 3 hours: 100 marks)

(i) **Evolution of auditing** — major influences of auditing; nature and scope of auditing; basic concepts of auditing; role of evidence in auditing; auditing techniques and practices – generally accepted auditing standards; the concept of materiality in auditing.

(ii) **Verification of assets and liabilities** — fixed assets, investments, inventories, debtors, loans and advances, cash and bank balances, debentures and creditors, provisions for taxation, proposed dividend and gratuity – other items in the balance sheet; verification of items in the profit and loss account; contingent liabilities; disclosure of accounting policies, practice; expenditure during the period of construction; adjustments for previous year – provisions of the Companies Act, 1956 regarding accounts.

Nature of internal control, evaluation and audit of internal control - internal control questionnaires; flow chart; systems audit, internal control.

Auditing-in-depth — statistical sampling in auditing. Use of ratios and percentages for comparison and analysis trends - inter-firm and intra-firm comparison.

(iii) **Appointment of statutory auditors** — auditors' remuneration, removal, rights of statutory auditors, duties of statutory auditors, joint auditors, branch audits.

Audit report — report versus certificate, contents of the reports, qualifications in the report.

Divisible profits — relevant provisions of the Companies Act, 1956 and the Income-tax Act, 1961.

Interface between statutory auditor and internal auditor.

(iv) **Nature and scope of internal auditing** — financial versus operational audit; concepts of efficiency audit, propriety audit, voucher audit, compliance audit, pre and post audits.

Impact of the Manufacturing and Other Companies (Auditors' Report) Order, 1988 on the internal auditing functions.

Organisation of the internal auditing function - selection and training of staff-assignment of audit projects organisational status of the internal auditing functions; scope for audit committees.

Planning the internal audit project: familiarisation; preparing checklist, internal control questionnaires, audit programmes.

(v) **Verification of evidence** — detailed checking versus sampling plans, statistical sampling as used in internal auditing; flow chart techniques.

Internal control — nature and scope, internal auditor and internal controls.

Field work — collecting evidences, interviews; memoranda.

Audit notes and working papers.

Audit reports - techniques of effective reporting; follow up of audit report.

Summary reports of top management.

Communications in internal auditing - improving auditor-auditee relationship.

(vi) **Auditing the operations functions of an enterprise** — accounting and finance, inventory control, procurement, production, marketing, maintenance, personnel, branches and depots; research and development. Information systems audit, Internal Auditor and the investigation of frauds. Auditing the internal auditing function.

(vii)Audit of accounts prepared as per US GAAP.

(viii)Secretarial Audit-checklist, contents of memorandum of Association and articles of association, Issue of shares, Right issue, Registers maintained

Paper 12: Quantitative Methods (One Paper: 3 hours: 100 marks)

Mathematical Techniques (40 marks)

Algebra of vectors and matrices and determinants: Addition, subtraction, multiplication and inversion of vectors and matrices, solution of systems of linear equations with the help of matrix algebra.

Calculus: Variables, constants and functions – graphs of functions – limits of algebraic functions, simple differentiation of algebraic function – meaning of derivatives – evaluation of first and second order derivatives, partial differentiation; solution of problems involving maxima and minima of algebraic functions.

Integration (by substitution and by parts): Determining indefinite and definite integrals for simple functions - application of integration to evaluate areas and volume of solids and revolution.

Optimisation of functions under constraints, Linear programming and simplex method of solution; other operations research methods e.g. games theory, simulation, transportation, queuing, etc.

Statistical Techniques (30 marks)

Probabilities — meaning and definition of probability, mutually exclusive and collectively exhausting events, repeated trials, *combinatorial* analysis. Addition and multiplication rules. Bayes theorem and its application.

Population and samples — sampling methods, uses of random numbers, simulated sampling, concept of sampling distribution and standard errors, confidence intervals for means and percentages, testing hypothesis and uses of *z*, *t*, chi-square tests.

Decision making under risks and uncertainty; decision tree analysis.

Simple regression and correlation.

Economic Techniques (30 marks)

Demand analysis — the basis of demand, market demand function, industry demand versus firm's demand; the demand curve; relation between demand function and demand curve; change and shift in demand; demand relation and managerial decisions; theory of consumer behaviour; substitution and income effects; price, income and cross elasticities of demand, other demand elasticities; time impact on elasticity; price elasticity for derived products; revenue concepts; demand estimation.

Forecasting — forecasting methodologies. Time series analysis, trend projection, barometric or leading indicator method; index number analysis – composite and diffusion indices. Econometric models, curve fitting and least square methods; correlation and regression analysis, multiple and partial correlation - input-output analysis; forecasting with input-output tables, criteria for forecasting demand for existing and new products.

Empirical production function analysis, empirical cost analysis, short and long run cost estimation, factor demand, joint product and multi-product, factor demand, joint product and multi-product firm, uncertainty in production function, profit planning under risk & uncertainty.

FINAL COURSE

STAGE - III

Paper 13: Operations and Project Management & Control (One Paper: 3 hours: 100 marks)

Section I: Operations Management (50 marks)

(i) **Technology of production techniques** — meaning and implication of technology, different concepts like relevant technology or appropriate technology, high-tech versus low-tech, capital intensive versus labour-intensive, batch process. Technology forecasting, shape of things to come in 21st century. Basic ideas regarding manufacturing techniques including machine tools process technology, productive facilities, productive utilities and manufacturing policies, some broad ideas about the technological aspects involved in the industries covered under the cost audit. World-class manufacturers flexible manufacturing systems, JIT, MRPI, MRPII and advanced systems to come.

Production planning, scheduling and monitoring system — the concept of integrated production planning system, linkage between production planning and sales forecasting, procurement planning and finished goods inventory policy. Actual scheduling of jobs optimisation concept in terms of productive facilities utilisation and cost minimisation through start up change over, etc. Production monitoring system and Management Information System for this purpose, regular review of production planning and monitoring, Decision Support System (DSS).

(ii) **Production Economics** — analysis of problems involving location, multishifts, product mix, material handling facilities, utilisation of multipurpose plants, utilisation of preventive maintenance, utilisation of capacity rectification of unbalanced capacity, off loading of products, stages of production, product plant, process planning, scheduled production stages, controlling quality level, controlling of output costs, products usage and its obsolescence, technological usage and its obsolescence, control of output costs on the basis of its cost of factors of production and utilisation of capacities, sealing of capacity with the help of rationalisation, modernisation, revamping and renovation. Expansion and growth.

(iii) **Productivity** — meaning and significance of productivity, productivity *vis-à-vis* absolute production, measurement of productivity – both overall and separately for each factor like man, machine, materials. Productivity and cost productivity, improvement techniques, time study, work sampling and other techniques for productivity monitoring, productivity bargaining, tools and techniques, productivity and work methods as well as quality of work life, job evaluation and merit rating and use of these in productivity of human resources. Cost reduction and value analysis in the context of productivity. Learning curve concepts in the context of productivity.

Cost implications of multi-shift operations, plant shutdown, plant expansion, retracting of detectives, automation in productive system, utilities management, replacement of machinery and financial impact of technology up gradation and absorption.

Section II — Project Management (50 marks)

(i) **Project identification and formulation** — different types of needs leading to different types of projects under BMRED (Balancing, Modernisation, Replacement, Expansion and Diversification) considerations involved in decision under each of these types. Macro parameters in project selection, different

considerations for project under private, public and joint sectors. Project formulation - preparation of project profile, project report and detailed project report. Broad criteria for pre-investment decisions.

Project appraisal — different types of appraisal – Technical, economic, organisational and managerial, commercial and financial - financial techniques for project appraisal and feasibility, discounted cash flow and non-discounted cash flow methods, social cost benefit analysis and economic rate of return. Non-financial justification of projects.

Project financing — pattern of financing, sources of finance, impact of taxation, public loans, small savings surplus of public enterprises, deficit financing, foreign aid. Public sector project financing. Role of tax planning in project financing.

(ii) **Project cost systems** — project cost accounting and monitoring, appointment of contractor and its problems, labour and equipment costs, accounting, codification, development of cost data, labour time, reporting, direct measurement of work quantities, labour cost analysis, equipment accounting, activity – based cost accounting, production rates for estimates, control of cost, computer application to cost control.

(iii) **Project administration** — progress payments, expenditure planning, project scheduling and network planning, use of Critical Path Method (CPM), schedule of payments and physical progress, time-cost trade off, cash flow preparing, cash forecast and monitoring of fund and other resources, control of groups of projects under one administration and associated problems in sharing resources.

Concepts and uses of Project Evaluation and Review Techniques (PERT), cost as a function of time, project evaluation and reviews techniques/cost mechanisms. Accountant's role in project evaluation and review techniques/cost budgeting. Determination of least cost duration. Post project evaluation.

Paper 14: Advanced Financial Management and International Finance (One Paper: 3 hours: 100 marks)

(i) **Planning environment** — financial objectives, policies on financing, investments and dividends. Financial forecasting, planning and uncertainties, interest rates, inflation, capital gains and losses, exchange control regulation, government credit policies and incentives, statistics on production, price indices, labour, capital market based on published statistical data.

(ii) **Sources of finance (national)** — Medium and long term; venture capital, seed capital, equity preference, convertible and cumulative preference shares, debentures, convertible debentures, hire purchase, leasing, public deposits and institutional finance Life Insurance Corporation, Unit Trust of India, Industrial Finance Corporation of India, Industrial Credit and Investment Corporation of India, National Industrial Development Corporation, Industrial Development Bank of India, Small Scale Industrial Development Bank of India (SIDBI), State Finance Corporation (SFC), Industrial Rehabilitation Bank of India (IRBI).

Internal sources, retained earnings, provisions etc. Issues in raising finance, legal form of organisation, provisions of the Companies Act, control of capital issues. Short term sources: Trade credit, factoring, Bill of exchange, Bank Loan, Cash credit, overdraft, public deposit, SEBI regulations, Primary and Secondary markets.

Sources of Finance (International) — raising funds in foreign markets and investments in foreign projects, exchange rate - risk agencies involved and procedures followed in international financial operations - concepts of balance of trade and balance of payment.

(iii) **Analysis of operating and financial leverages** — concept and nature of leverages operating risk and financial risk, operating leverages, financial leverage and combined leverage - concepts, measures and their interpretations. Operating leverage and Cost volume Profit analysis – Earning Before Interest and Tax (EBIT) and Earning Per Share (EPS), indifference point.

Capital structure theories and planning — concept of capital structure and its perimeters, financial structure and capital structure – simple and complex; theories of capital structure- net income approach, net operating income approach, traditional and Miller and Modigliani approaches and their criticism. Factors for capital structure planning; capital structure trend in private and public sectors in India.

Cost of capital — its nature and meaning, relevance of cost of capital in financial decisions, computation of specific cost, selection of weight, overall cost and marginal cost of capital, corporate tax and its impact on cost of capital.

(iv) Capital budgeting and impact of time lag in analysis of capital utilisation and viability - pay back period, present value and internal rate of return including sensitivity analysis, limitations on capital budgeting. Determination of the Cost of capital - risk of uncertainty, risk and return in a ports contexts capital Asset pricing model (CAPM), inflation, leasing versus buying, income taxes, benefits of accelerated cost recovery system (higher rate of depreciation), investment credits.

Working capital management — operating cycle concept, forecasting, working capital requirement, strategies of financing current assets; working capital and term loans, official regulations; monitoring advance management of different components; working capital management under inflation, new projects working capital management.

Financial services — Money market, Capital market, Functions of bank-lending etc., Merchant banking, leasing, hire purchase, cash purchase and factoring.

(v) **Advanced financial analysis and planning** — financial statements, financial ratio analysis, fund flow and cash flow analysis, leverages, Cost-Volume-Profit analysis, financial forecasting, inter firm comparison, financial analysis and aspects inflation.

Dividend and retention policies — formulating dividend policy: factors for consideration, dividend theories - Walter's model, Gordon's model, residual theory of dividend, Miller and Modigliani hypothesis. Indian position in private and public sector in general.

Financial management in public sector — Management of accounts receivable and inventories in public sector: units, source of fund of public sector units – cost of loans, cost of equity, cost of retained earning and debt equity ratio; evaluation and control of capital expenditure – determination of cash flows and cost-benefit analysis; pricing policy of public enterprises, project formulation and implementation, social cost benefit analysis.

Contemporary developments — WTO, GATT; Corporate Governance – UK's Cadbury, Greenbury and Hampel Committee recommendations, Anti dumping laws, TRIPS, TRIMS, Copyright and patent laws and current developments including SEBI regulations as amended form time to time.

(vi) **International finance and risk management** — Minimisation of political risk, risk of fraud (*i.e.* fraud policy statements), effective recruitment policies and good internal controls especially over procurement and cash; diversifying risk; management of interest rate risk including the use of interest rate swaps. Forward rate agreements and interest rate guarantees. Interpretation of interest options using simple

graphs to show caps, floors and collars. Transaction, translation and economic risk, Interest rate parity, purchasing power parity and the Fisher effects. Foreign Direct Investment

Forward contracts and money market hedges. Currency features and options. Currency swaps and internal hedging techniques. Other current International Finance Issues.

Paper 15: Strategic Management and Marketing (One Paper: 3 hours: 100 marks)

(i) **Planning environment economics** — forecast trend and changes – social, political, legal and technological impacts. Distribution channels and competitive forces. Government policies, economic growth and government expenditure. Public and private sector investments. International trade prices and government policies for capacity expansion, new industries, subsidiaries and substitutes, Government role in controlling inflation.

(ii) **Strategies** — meaning and implications of corporate planning, long range planning, business policy planning, strategic planning and strategic management, processes of developing strategic plan – definition of mission, corporate objectives – (Profit gap, sales gap, risk gap) and other strategies, SWOT (Strength, Weakness, Opportunities & Threats) analysis, target selling strategy formulation and implementation, monitoring mechanism, strategies for stagnation versus growth, strategies for growth through expansion versus diversification, Acquisition and merger strategy, strategy of joint venture both in India and abroad. Marketing strategy as a part of corporate strategy, growth under inflation and protection of shareholder, real capital. Financial objectives, non-financial objectives, resources analysis and evaluation.

(iii) **Model Building and models** — strategies in the development of models, Delphi Model, econometric, mathematical programming, budgetary and heuristic model. Sensitivity analysis and the characteristics of this model. Limitations in model building vis-à-vis simulation techniques. Life cycles, Porters generic strategic, Ausojs model, BCG matrix and other models.

(iv) **Basic concepts of marketing** — production orientation versus market orientation, marketing objectives, framework and management of marketing mix.

Linkage between strategic planning and marketing strategy - both forward and backward.

Research and intelligence — sources for the techniques for acquiring information necessary for marketing decision-making market shares.

(v) **Control or application of management accounting in marketing** — analysis of marketing costs and profitability, pricing policies and strategies, budgetary control in marketing, evaluation and control of sales activities.

(vi) **Evaluation of sales promotion and advertisement** — Distribution cost analysis and control. Evaluation of marketing research and marketing planning.

Contribution analysis and product-line profitability analysis, product rationalisation including product revamping, product range extension, product elimination, new product introduction. Evaluation of research information - perfect, imperfect and Bayes' Theorem.

Paper 16: Strategic Tax Management (One Paper: 3 hours: 100 marks)

(i) **Direct Tax planning** — tax planning v. tax evasion, tax management, tax implications in planning, the legal status of business unit, firm, private limited company and public limited company. Tax planning in respect of different heads of income. Tax implications in International Joint Venture

Tax aspects of mergers and amalgamations.

New Industrial establishment and tax planning.

(ii) Tax considerations arising with regard to specific management decisions such as — (1) make or buy; (2) own or lease, (3) retain or replace; (4) repair or scrap or return; (5) export versus local sale; (6) shut down or continue; (7) expand or contract (8) merger and acquisition (9) new capital investment; tax exemptions; various deductions under chapter VI.

(iii) Tax incentives and export promotions.

Tax aspects of investments.

Tax implications in developing capitalisation structure and

- (a) short term loans; (b) deposits from public;
- (c) term loans; (d) bonus issues;
- (e) dividend policy.

(iv) Wealth tax planning — individual, companies, etc and tax planning.

(v) Indirect taxes planning — Different aspects of tax planning and tax management in relation to.

- (a) Central Excise Act;
- (b) Customs Act;
- (c) Sales Tax Act.

STAGE IV

Paper 17: Management Accounting — Decision Making (One Paper: 3 hours: 100 marks)

(i) **Basic concepts in decision making** — relevant costs and benefits; Joint cost allocations and common costs; qualitative factors; sales mix, quantity, market size and market share variances. Transfer pricing, negotiated prices, dual pricing, external pricing strategies – premium pricing, penetration pricing, market skimming, loss leaders, product differentiation, International transfer pricing – taxation, currency, remittance of funds. Profit maximisation, Pareto analysis, risk and uncertainty, decision trees, learning curve, alternative costing systems. Applications of Operation Research techniques (linear programming, Transportation, simulation, PERT, CPM etc.) in decision-making.

(ii) **Costing and accounting systems** — activity based costing and activity based management; customer profitability analysis; direct product profitability; just-in-time and back flush accounting; theory of constraints and throughput accounting; behavioural aspects of alternative costing systems; target costing; life cycle costing, Parametric cost control.

(iii) **Investment appraisal** — capital budgeting process; investment appraisal techniques – pay back, discounted pay back, accounting rate of return, net present value, IRR, benefit-cost ratio.

Taxation, inflation, replacement, unequal lives, sensitivity analysis.

Divisional performance – return on investment; residual income. Post completion appraisal.

Paper 18: Management Accounting – Financial Strategy and Reporting (One Paper: 3 hours: 100 marks)

(i) **Financial strategy formulation** — Modelling annual cash flow forecasts and other financial statements based on expected changes in values e.g. inflation, volume, margins and probabilities, expected values and sensitivity analysis. Hire purchase and leasing.

(ii) **Measurement of income and capital** — The problems of profit measurement and the effect of alternative approaches to asset valuation. The principle of Substance over Form.

The accounting treatment of goodwill, intangible and tangible assets.

Inflation and its effect on financial statements.

Impairment of fixed assets, brands and goodwill.

Provisions and contingent liabilities and contingent assets.

Foreign currency translation to include overseas transactions and investments in overseas subsidiaries.

(iii) **Analysis of Financial Statements** — Advance topics on interpretation of financial statements via the analysis of corporate reports. Ratios in the areas of performance, profitability, financial adaptability, liquidity, activity and gearing of business, segmental analysis; inter firm comparison.

(iv) **Advanced investment appraisal** — Capital investment real options (i.e. option to make follow-on investment, the option to abandon and the option to wait). Weighted Average Cost of Capital and its use; adjusting the WACC for changes in capital structure. Single period capital rationing for divisible and non-divisible projects.

(v) **Capital Asset Pricing Model (CAPM)** — Advanced aspects of arbitrage pricing theory; risk adjustment using the certainty equivalent method; investment controls in practice.

(vi) **Financial analysis and reporting** — disclosures, productivity and profitability reporting, performance measurement/development reports. Current issues in financial analysis and reporting.

Paper 19: Cost Audit and Management Audit (One Paper: 3 hours: 100 marks)

Aim: To provide an in-depth study of the body of knowledge comprising of the techniques and methods of planning and executing a Cost and Management Audit assignment.

Section I: Cost Audit (50 marks)

(i) Provisions relating to maintenance of Cost Accounting record under the Companies Act; recording and audit compliance of cooperative societies Act, Customs & Excise Act, WTO, Antidumping processing, export-import policy & special provisions of sick industries Act (SICA) etc.

(ii) **Nature, objects and scope of Cost Audit** — The concepts of efficiency audit, propriety audit, management audit, social audit.

(iii) **Appointment of Cost Auditor** — Procedure for appointment, his rights, responsibilities, status, relationship and liabilities – professional and legal under the Companies Act, 1956 (1 of 1956), the Cost and Works Accountants Act, 1959 (23 of 1959)

- (iv) **Planning the audit** — Familiarisation with the industry, the organisation, the production process systems and procedures, list of records and reports, preparation of the audit programme.
- (v) **Verification of records and reports** — Utilisation of statistical sampling methods - verification of performance and statements maintained under the Cost Accounting (Records) Rules.
- (vi) **Evaluation of Internal Control Systems** — Budgetary Control, capacity utilisation, inventory control, management information system.
- (vii) Assessment of the adequacy of the internal audit function.
- (viii) **Audit notes and working papers** — audit reports to management.
- (ix) **The Cost Audit Reports** — contents of the Report, distinction between "Notes and Qualifications" to the Report. Cost Auditor's observations and conclusions.
- (x) Professional Ethics and Code of Conduct.
- (xi) Relationship between the Statutory Financial Auditors, the Internal Auditor and the Statutory Cost Auditor.
- (xii) Cost Accounting (Records) Rules under clause (d) of sub-section (1) of section 209 (issued one year before the examination) and Cost Audit (Reports) Rules issued under section 233-B of the Companies Act, 1956 (1 of 1956). Critical study of the rules including the prescribed Annexure and Proforma applicable to the industries covered.
- (xiii) Review of Cost Audit Report by the Government: Objectives, methods, follow-up actions and disposal of Cost Audit Reports by the Government company and other end-users of the Cost Audit Reports.
- (xiv) Comparative Studies between cost audit and financial audit with special reference to disclosure of information to members, parliament and the general public.
- (xv) Penal provisions for Companies and Cost Auditors.
- (xvi) Disciplinary proceedings.

Section II — Management Audit leading to other Services (50 marks)

A. Management Audit

- (i) Meaning, nature and scope, organisational needs for Management Audit and its coverage over and above other audit procedures.
- (ii) Audit of the Management Processes and Functions, such as Planning, Organisation, Staffing, Co-ordination, Communication, Direction and Control.
- (iii) Evaluation of Management Information and Control Systems with special emphasis on Corporate Image and Behavioural Problems.
- (iv) Corporate service audit (Customer services): Product (Research and Development) and import substitution, customer's channels (export), CRM
- (v) Corporate Development and Management Audit, including operational and propriety aspects.
- (vi) Social Cost and Benefit of business enterprises with particular reference to developing countries.
- (vii) Audit of Social responsibility of management.

(viii)Corporate governance and Audit Committees

B. Other Services

(il)Other service sector to the Management, Certification for various purposes – the records to be verified and the safeguards to be taken – the form and content of the certificates.

(ii)Cost audit as an aid to management, Government, shareholders, other external agencies and the public voluntary Cost Audit.

(iii)Productivity Audit – labour, material and capital.

(iv)Audit of Energy Conservation and Environmental Protection.

(v) Efficiency audit – audit of sub-systems of an enterprise.

(vi)Assessment and quantification of losses under marine, fire and accident insurance policies.

(vii)Inventory Audits for Banks and other agencies.

(viii)IRDA, Insurance Act, CARC.

Paper 20: Valuations Management and Case Study (One Paper: 3 hours: 100 marks)

Section I – Valuations Management (70 marks)

(i)**Principles and Techniques of valuation** — asset valuation bases (e.g. historic, replacement, realisable); earnings valuation bags (P/E multiples, earnings yield). Cash flow valuation bases (*i.e.* DCF dividend yield, dividend growth model).

(ii)Other valuation bases (*e.g.* earn out arrangements, super profits method). The strength and weaknesses of each valuation method and the suitability of each method.

(iii)Application of the efficient market hypothesis to business valuation.

The impact of changing capital structure on the market value of a company

The different forms and methods of valuation of intellectual capital. The reasons for acquisitions (*e.g.* synergistic benefits, removing competitions)

The priorities of different stakeholders in terms of business valuation.

(iv)Valuating bases for takeovers, mergers, amalgamation,

(v) Valuation of shares, debentures, inventory, brand and other tangible and intangible assets as well as different liabilities.

Section II – Case Study (30 marks)

(i)To apply strategic management accounting techniques to make and support decisions within a simulated business contact.

(ii)The case study will be based on other final level papers and will draw upon material already covered in the previous levels.

(The case study will require the student to deal with material in less structured situations to integrate a variety of tools in arriving at a recommended solution. It is obvious that cannot be a single right answer.

The process that students undertaken in arriving at potential solutions are viewed as being more important than the recommendations.

The stages to case study —

1. Analyse and identify the present position of an organisation.
2. Analysis and identify problems facing an organisation.
3. Appraise possible feasible courses of action available.
4. Evaluate and then choose specific proposals.
5. Identify and evaluate priorities related to the proposals.
6. Prepare and present information in a format suitable for presentation to senior management.