



Gondwana University, Gadchiroli

FACULTY OF COMMERCE

**SYLLABUS GOVERNING THE EXAMINATION
LEADING TO AWARD OF THE TWO YEARS POST GRADUATE DEGREE
COURSE MASTER IN BUSINESS ADMINISTRATION IN THE FACULTY OF
COMMERCE WITH SEMESTER PATTERN & CREDIT GRADE SYSTEM FROM
THE YEAR 2012-13**

Dr. R. P. Ingole

Chairman
Faculty Of Commerce
Gondwana University
Gadchiroli

Paper C11: Principles of Business Management

Unit I: Basic Concept of Management: - Nature, definition and importance of management, Purpose and scope of management, Functions of management, Management: science or art, Management and Administration,

Case Study: Professionalism of management in India.

Unit II: Evolution & Development of Management Thought - Scientific management; Contribution of Taylor, Fayol, Mary Follet, Elton Mayo, Peter F. Drucker; Hawthorne experiments, Contingency approach. Management ethics and Management Culture, skills required by Manager, methods of skill development,

Case study: Comparative study of main features of Japanese Management and Z culture of American Companies

Unit III: Management Planning & Decision Making – Meaning, Definition, characteristics of planning, objectives of planning, Nature of planning, Importance and Advantages of planning Steps in planning process, Limitations of planning, Essentials of a good planning,

Concept, characteristics of decision Making, Types of decisions, Steps Involved in decision making, Importance of decision making, Innovation and Creativity in Decision making.

case study-Strategic planning in Indian Industry, MBO

Unit IV: Organisation, Coordination & Direction - Concepts, Principle of organization, Importance, Features of good organization structure, Types of Organisation structure.

Coordination – An essence of Management, Importance and need for coordination, Principles of coordination, Methods of achieving effective coordination; Meaning of direction, Importance and Principles of direction, Characteristics of good directives.

Unit V: Authority and Responsibility - Authority, Responsibilities and Accountability, characteristics of authority, Importance of authority, Types of authority, Delegation of Authority, Limitations of Authority, Span of control.

Unit VI: Controlling - Concept, Definition, Areas or scope of control, planning-control relationship, steps in control process, Types of Control - (a) Feed forward control (b) Concurrent Control (Real Time Information & Control), (c) Feedback Control. Techniques of control, Essentials of an effective control system.

Suggested Readings:

1. Principles of Management, Dr. Neeru, Vasishth, Taxmann's
2. Principles of Management, T. Ramaswamy, Himalaya Publishing House
3. Essentials of Management, Harold Koontz & Heinz, Wehrich, 5th Tata McGraw Hill
4. Management (A Global Perspective), Heinz Wehrich & Harold Koontz, 10th Tata McGraw Hill
5. Fundamentals of Management, Robins, 3rd Pearson Education Asia

Paper C12: Managerial Economics

Unit - I: Introduction to Managerial Economics: Definition, Nature and Scope of Managerial Economics, Application of Economics to Business Decision, Relationship with other areas in Economics, Production Management, Marketing, Finance and Personnel, Operations research - The role of managerial economist-

Unit – II: Demand and Supply Functions –Theory of Demand: Demand Analysis, Elasticity of demand, types and significance of Elasticity of Demand. Demand estimation – Marketing research approaches to demand estimation. Need for forecasting, forecasting techniques. Supply Analysis – Supply function, the Law of Supply, Elasticity of Supply. Practical Problems on Demand curve and Demand Function

Unit–III: Production & Cost Analysis - Production & Production Function: Concept, Forms of production function, Law of variable Proportions, Returns to scale. Cost concept, Short term and long term cost, average cost curves, cost output relationship, Cost curves, Economies & Diseconomies of scale. Practical Problems on estimation of production function – Kobb-Douglas production function.

Unit– IV Pricing Decisions, Policies & Practises: Pricing Decisions, Policies & Practises, Pricing & Output Decisions under Perfect & Imperfect Competition, Oligopoly & Monopoly, Pricing Methods, Product-line Pricing, Specific Pricing Problem, Price Dissemination, Price Forecasting.

Unit V Profit Management : Profit Management Role of Profit in the Economy, Nature & Measurement of Profit, Profit Policies on Profit, Maximization , Profit & Control, Profit Planning & Control.

Unit VI Business cycles & Stabilization - Concept, Causes & Impact, Concept of multiplier accelerator, Plicy Measures to control Business cycles inflations ,kinds of inflation effects of inflation, policy measure to control and Deflation, types, causes and control of deflation. Monetary policy- meaning and scope of monetary policy-instrument of monetary policy;.

Suggested Readings:

1. Managerial Economics – Joel Dean
2. Managerial economics : Concepts & Cases – Mote, Paul & Gupta
3. Managerial Economics- Milton Spencer & Louis Sigleman.
4. Managerial Economics, P. L. Mehta, Sultan Chand & Sons, New Delhi
5. Managerial Economics, D.N.Dwidevi, Vikas Publishing House Pvt. Ltd.
6. Indian Economy, Mishra & Puri, 2007, Himalaya Publishing House

PaperC13: Foundations of Marketing & Sales Management

Unit - I

Introduction to marketing; concepts, marketing environment; interaction of marketing with other functions, segmentation, targeting & positioning, marketing mix (4Ps, 7Ps, etc.), PLC.

Unit - II

New product development process, pricing, pricing methods, techniques and strategies, promotion basics, promotion methods & strategies, Distribution, logistics & supply chain management, warehousing & storage.

Unit - III

Marketing Communication, Understanding the communication process, Managing Advertising, Sales promotion, Public relations & Direct Marketing.

Unit - IV

Personal Selling, selling processes, types of sales organizations, staffing (recruitment, selection & training) of sales organizations.

Unit - V

Sales forecasting, designing sales strategies and sales programmes, designing sales force compensation & incentive plans, designing sales target setting & territory distribution programmes.

Unit - VI

Sales cost analysis, managing sales performance, sales monitoring, sales reporting, methods of sales control and motivating sales force.

Suggested Readings:

1. Marketing Management – Kotler, Keller, Koshy, Jha
2. Principles of Marketing – Kotler, Armstrong, Agnihotri, Haque
3. Sales Management – Still, Cundiff & Govoni
4. Sales Management – Matin Khan
5. Selling & Sales Management – Jobber, Lancaster
6. Internet Marketing Start to Finish - Juon / Greiling / Buerkle
7. Global Search Engine Marketing: Getting Better International Search Engine Results - Kennedy / Hauksson
8. Social Media Marketing: Strategies for Engaging in Facebook, Twitter & Other Social Media - Evans
9. Facebook Marketing - Levy
10. YouTube for Business: Online Video Marketing for Any Business - Miller
11. The Ultimate Web Marketing Guide - Miller

Paper C14: Foundation Course in Human Resource Management

Unit I: Unit I: Human Resources Management- Introduction, Definition, Scope of HRM, Objectives of HRM, Importance of HRM, Function of HRM, Evolution of HRM, Difference between Personnel Management and HRM, Strategic HRM, Role and qualities of HR Manager.

Unit II: Job Analysis & Design - Job Analysis – Meaning, Uses, Process and methods of collecting data for job analysis, Competency approach to job analysis, Job Description, Job Specifications & Role Analysis, Factors affecting Job Design, Techniques of Job Design, Cases and Exercises in understanding Job Analysis.

Unit III: Human Resources Planning & Recruitment Policy - Human Resources Planning; Need for Human Resources Planning; Process of Human Resources Planning; Human Resource Planning System; Responsibility for Human Resource Planning. Recruitment Policy; Factors Affecting Recruitment; Sources of Recruitment; Recruitment Practice in India; Assessment of the Recruitment Programme

Unit IV: Selection, Induction & Placement - Selection Process, New tools /Methods of selection – Interviews, Tests and assessment of effectiveness of selection tools. Induction Programme, Problems in Induction, Requisites of effective Induction, Typical Induction Programme – Do's & Don'ts, Placement – Internal Mobility, Transfers, Employee Separations.

Unit V: Employee Growth & Development Training - Introduction of Training; Objectives and Importance of Training; Training Needs Identification. Organization Analysis; Task Analysis; Man Analysis; Training Areas Identified by Trainers; Responsibility for Training; Training Organization; Lead Time Planning; Types and Techniques of Training and Development; Objectives of Training Methods; Classification of Training Methods/Techniques; Training by Supervisors; Need and Importance of Management Development; Evaluation of Training; Reasons of Training Failure; Improving Effectiveness of Training.

Unit VI: Performance Appraisal - Nature, Objectives, limitations–various methods – Modern & Traditional, Multiple Person Evaluation Methods; Performance Tests & Field Review Techniques; Appraisal, Praise and Recognition; Rewards and Incentives; Promotions. HR Records, MIS HR Reports, HR Formats – Personnel Files, Attendance, Leave, Medical Records.

Unit VII: Compensation Management - Wage & Salary Administration-Introduction; Wage & Salary Administration; Theories to Determine the Wages; Classification of Wages; Machinery for Fixing Wages; Job Satisfaction, Job Evaluation; Objectives of Job Evaluation; Job Evaluation Methods; Advantages and Limitations of Job Evaluation.

Suggested Readings:

1. A Text book of Human Resource Management – C. B. Mamoria & S. V. Gankar. Publication - Himalaya Publishing House
2. Personnel and human Resource management - Text & cases, P Subba Rao, Publication - Himalaya Publishing House
3. Human resource Management – P. Jyothi, Publication – Oxford University Press.
4. Human Resource Management , Ninth Edition, R.Wayne Mondy, Robert M, Noe, Publication-Pearson Education
5. Human Resource and Personnel Management – Text and cases, K. Aswathappa, Publication - McGraw- Hill Publishing co. ltd.

Paper C15: Financial Accounting

Unit-I: Introduction to Accounting: Introduction of financial accounting, Importance, Objectives and Principles of Accounting, Concepts and conventions, relationship of accounting with other disciplines Difference between Management accounting And Financial Accounting. The Generally Accepted Accounting Principles (GAAP), Difference between management accounting and financial accounting. **Accounting Process-** Journal and ledger, Trial Balance, Classification of capital and revenue expenses, preparation of subsidiary book – cash book (single and double column), and other subsidiary books .Bank Reconciliation statement (Reconciliation between bank pass book and cash book).

Unit II: Accounting of Non – profit making institutions: Introduction of non – profit making institutions, features of receipt and payment account, income and expenditure account and difference between the two, preparation of final accounts of non – profit making institutions.

Unit III: Final Account of Joint Stock Companies: – Meaning and Definition of joint Stock Companies; Essential Characteristics of company; Kinds of Company. Final Accounts of Joint Stock Companies – contents, and preparation of Trading and Manufacturing, Profit and Loss Account, Profit and Loss Appropriation Account and Balance sheet with adjustment.

Unit IV: Valuation of goodwill and shares: Concept and nature of Goodwill, factors responsible for goodwill, methods of determining Goodwill – Based on Simple Profit (Purchase of number of years, Capitalization of Simple profit), Based on Super profit (Number of years purchase, sliding scale valuation method, capitalization method and annuity method), Valuation of shares – Net Assets Method, Yield Method, Earning Capacity Method (Overall rate of Return Method), Fair Value Method.

Unit V: Issue of Shares and Debentures: Entries for Issue of shares, forfeiture and re-issue of forfeited shares .Issue of shares at Discount and premium. Issue and Redemption of Debentures: Meaning, issue of debentures for cash and other than cash, treatment of discounts and losses on issue, meaning of redemption, redemption out of capital and profits.

Unit VI: Liquidation Of Companies: Meaning of Liquidation . Objective of Liquidation Types of Liquidation; Liquidation Under supervision of the court; Compulsory Liquidation. Liquidation Statement of Account.

Suggested Readings:

1. Advance Accounting Jain Narang (Kalyani Publisher).
2. Financial Accounting Dr S.N. Maheshwari (Vikas Publishing).
3. Text Book of financial, Cost And Management Account Dr P. Periaswamy (Himalaya Publication).
4. Advance Accounting Dr S. M. Shukla

Paper C16: Quantitative Techniques

Unit I: Measures of Central Tendency and Dispersion - Arithmetic Mean, Median, Mode, Comparison of Mean, Median and Mode. Range, Quartile Deviation, Mean Deviation, Standard Deviation, Relative Dispersion: Coefficient of Variance.

Unit II: Correlation & Regression Analysis - Karl Pearson's method, Coefficient of Determination, Rank Correlation. Uses & properties of correlation coefficient. Lag and lead in correlation, Correlation in grouped data; Concept of Covariance, multiple and partial; correlation.
Regression: Method of Least Squares, Regression Coefficient, Standard Errors of Estimate.; Uses and properties of regression coefficient.

Unit III: Time Series Analysis and Forecasting - Components of Time Series, Trend - Moving averages, semi-averages and least-squares, seasonal variation, cyclic variation and irregular variation, Index numbers, calculation of seasonal indices, Additive and multiplicative models, Forecasting, Non linear trend – second degree parabolic trends

Unit V: Statistical Decision Theory and Markov Chain : Elements in decision making – acts, states of nature, decision making under certainty and uncertainty. Decision Choice criteria – MAXIMIN, MAXIMAX, MINIMAX regret, EMV , EOL & EVPI , Decision Tree. **Markov Chain** : Characteristics & application of Markov Chain , state & transition Probability, Steady state condition.

Unit IV: Transportation & Assignment Model - Formulation and Solution by North West Corner Rule (NWC), Least Cost Method (LCM) and Vogel's Approximation Method (VAM); Optimization by Modified Distribution Method (MODI). Assignment - Formulation and Solution.

Unit VI: Linear Programming and Problem formulation: Meaning of LPP and optimization, constraints and feasible region, Formulation of LPP for 2 and more variables, Determination of optimum solution by graphical & Simplex Method.

Suggested Readings:

1. Business Statistics, G. C. Beri (TMH)
2. Quantitative Techniques in Management, N. D. Vohra (TMH)
3. Quantitative Methods For Business, Anderson (Thomson Learning Books)
4. Statistical methods, S.P. Gupta (S Chand)
5. Levin Richard & Rubin David – Statistics for Management (Prentice Hall of India)
6. Quantitative Methods – S Saha, S Mukherji (Central)
7. Operation Research – J.K. Sharma
8. Operation Research – V. K. Kapour

Paper C17: Business Legislation

Unit I: The Indian Contract Act -1872: Nature and kinds of contract, essential elements of valid contract, Offer and Acceptance, Consideration, Capacity to contract and free consent, Legality of object. Unlawful and illegal agreements, Quasi contracts & Contingent contracts, Performance and discharge of contracts, Remedies for breach of contract. Indemnity and guarantee

Unit II: The Companies Act 1956: Definition & characteristics of a company, , Kinds of Companies, Provisions relating to incorporation, : Memorandum of Association, Doctrine of ultra-vires, Articles of Association, Doctrine of indoor management & constructive notice, Concept of Prospectus. Company Meetings, Resolutions Concept of Prospectus. Role & duties of promoter, transfer and transmission; Management –Appointment of Directors, Powers, duties, & liabilities of Directors. Winding Up of the Company - Types of Winding up.

Unit III: The Sales of Goods Act, 1930: Contract for Sale of Goods - Meaning - Essentials of a Contract of Sale - Formalities of a Contract of sale, Provisions relating to conditions and Warranties, Provisions relating to transfer of property or ownership, Provisions relating to performance of Contract of Sale - Rights of Unpaid Seller – Rules as to delivery of goods.

Unit IV Indian Partnership Act 1932:-Definition of partnership, types of partnership, formation of partnership, registration of partnership, kinds of partners, rights and liabilities of partners, minor's status in a partnership firm, dissolution of partnership firm. Requirements in a partnership deed Limited Liability Partnership Act 2008

Unit V Consumer Protection Act, 1986 Definitions of Consumer, Complainant, Goods, Service - Meaning of Consumer Dispute, Complaint - Unfair Trade Practices - Restrictive Trade Practices Rights of Consumers Consumer Disputes Redressal Agencies

Unit VI Negotiable Instruments Act 1881 & Information Technology Act 2000: Negotiable Instruments- Promissory Note, Bills of Exchange, & Cheque, and their definitions and characteristics, Types of endorsements, Holder- Holder in due course, Discharge of Parties. Procedure to be followed in case of dishonour of cheques

Information Technology Act 2000: Object and Scope of the IT Act Scope of the Act Digital Signature - Digital Signature Certificate Electronic Governance Electronic Records Certifying Authorities Penalty & Adjudication

Suggested Readings:

- Akhileshwar Pathak: Legal Aspects of Business, TMH, 3/e, 2009
- K.R. Bulchandani: Business Law for Management, , Himalaya, 2008
- Kuchal: Business Law, Vikas, 2009
- Tulsian: Business Law, TMH, 2008.
- N.D.Kapoor: Mercantile Law, Sultan Chand & Sons, 2009. .
- S.N.Maheshwari & Maheshwari: Business Law and Regulation, Himalaya,.2008

Paper C18: Computers for Managers

Course Objective:

To provide a foundation for understanding information technology in modern context as well as to provide the skills necessary for solving a range of information based problems in competitive business environment. The Course offers a range of learning from basics to advanced knowledge in the field of Information as applied to business

UNIT I Introduction to Computers: Types of Computer systems, Basic Computer operations, Networks: Internet, Intranet and Extranet Applications, Functional units of Computers, Practical data processing application in business, and Computer applications in various areas of business.

UNIT II The Software: Software types, Systems Software, Classification of Operating System, Application Software, Introduction to Programming Language, Types of Programming Languages. Introduction to Microsoft Office, working with MS Word, MS Excel, MS Power point, Data Base, Data Base Management System

UNIT III Internet, Security and E-Commerce: Introduction, History and Core features of the Internet, Internet Applications, Internet and World Wide Web, Extranet and E-mail, Mobile Computing, Electronic Commerce, Types of E-Commerce and their utilities

UNIT IV Management Information Systems:

Introduction to MIS, Principles of MIS, Characteristics, functions, structure & Classification of MIS, information for decisions; strategic importance of MIS, MIS in Manufacturing, Marketing, Finance Human Resource Management, Materials & Project Management; ERP: CRM and Supply Chain management. Managers and Decision making, Decision support systems: for Individuals, groups and Enterprise, Intelligent Support Systems.

UNIT V Managing Knowledge:

Introduction to Knowledge Management, Organizational Learning and Memory, knowledge management activities, Approaches to Knowledge management, Information Technology in Knowledge Management, knowledge Management Systems implementation, Roles of people in knowledge management, Managerial Issues in Knowledge Management.

UNIT VI Corporate Performance Management and Business Intelligence:

A framework of Business Intelligence: Concepts and Benefits, Business Analytics: Online analytical processing reporting and querying, Data Text Web mining and Predictive Analytics, Data Visualization, Geographical Information Systems and virtual reality, Real time business intelligence and competitive Intelligence, Business Performance Management Scorecards and Dashboards.

Suggested Readings:

1. Turban, McLean, Wetherbe 2003, Information technology for Management, John Wiley & Sons
2. S. Sudalaimuthu, S.Anthony Raj. 2008, "Computer Application in Business", Himalaya Publishing House
3. O'Brien, J.A. (2004). Management Information Systems: Managing IT in the Business Enterprise. (6th edition) Prentice Hall
4. Lucas, H. C. Jr. (2004). Information technology for management. (7th ed.). New Delhi: TMH
5. Jaiswal & Mittal, (2010), Management Information Systems, Oxford University Press
6. V. K. Narayanan, Managing Technology and Innovation for Competitive Advantage, 1/e, Pearson Education

Paper C21: Organisation Behavior & Development

Unit I: Introduction to Organizational Behaviour: Definition, Importance, Scope, Fundamental Concepts of OB, Different models of OB - autocratic, custodial, supportive, collegial and SOBC, Organisational behaviour and the workplace, Managing human rights in the workplace, Managing developments in information technologies, Managing organisational transitions, Managing new forms of Organisation. OB in virtual organisations.

Unit II: Learning, Perception, Attitudes and values - Biographical characteristics, ability, and learning Perception: Introduction, Halo effect, Stereotyping, pigeonholing and compartmentalisation; Self-fulfilling prophecy; Perceptual mythology; other influences on perception. Attitudes, Components of attitudes, Attitudes and behaviour, Attitudes and cognitive consistency, Job satisfaction as an attitude; development Values, Sources and types of values, Patterns and trends in values, Managing values and attitudes

Unit III: -Motivation- Concepts, Theories of Maslow, Herzberg, McClelland, Porter & Lawler Model, Application of Motivation concept, Individual motivation and motivation in the organization, Cultural Differences in Motivation, Intrinsic and Extrinsic Motivation, Social Motivation, Motivation and Health, Role of motivation in human behaviour

Unit IV: Foundations of group behaviour - The nature of groups: groups and teams, informal and formal groups, purpose of teams, Teams and team building: selecting team members, team roles, stages in team development, team building, team identity, team loyalty, commitment to shared beliefs, multi-disciplinary teams, Team Dynamics: group norms, decision-making behaviour, dysfunctional teams, Cohesiveness. Leadership: Basic qualities of leadership, Leadership theories, Managers are leaders.

Unit V: Conflict and Organizational Change Management- Substantive and emotional conflicts, Levels of conflict, Sources of conflict in organisations, Symptoms of conflict Causes of conflict, Strategies for the management of conflict Organizational Change - Nature, levels and dilemmas of change, Pressures for change, The Domino effect, Responses to change, Force field analysis, Change process, Resistance to change, Dynamics of change.

Unit VI: Organizational Development Techniques - Goals of organisational development: Principles underlying organisational development, The process of organisational development: Action research and organisational development, OD interventions: Organisation-wide interventions, Smaller group and inter-group interventions, Individual interventions OD Techniques - Traditional: Grid Training, Survey Method; Modern: Process Consultation Method, Third Party, Team Building, Transactional Analysis.

Learning and Teaching Strategy: Although the 'lecture' will provide a formal framework for each topic area, debate, discussion and participation shall be encouraged together with case study work and group activities.

Suggested Readings:

1. Organisation Behaviour, Luthans 8th Tata McGraw Hill
2. Organisation Behaviour, Robbins, 9th Pearson Education Asia
3. Principal of Organizational Behaviour 4th Ed. By R. Fincham –Oxford
4. Prentice Hall India Organisational Behaviour: Human Behaviour at Work Newstrom & Davis, 10th, Tata McGraw Hill
5. Brooks I — Organisational Behaviour: Individuals, Groups and Organisation Second Edition (Prentice Hall, 2002)

Paper C22: Environment Management

Unit I: Introduction to Environment Management - Definition, Scope & importance, Need for public awareness- institution in environment, Fundamentals– sustainable development, Unsustainable to sustainable development. Natural resources - Renewable and non renewable resources, and associated problems, Role of an individual in conservation of natural resources; equitable use of resources for sustainable life cycles;

Unit II: Ecosystem & Biodiversity - Concept of an Ecosystem , ecosystem degradation, resource utilization; Structure & functions of an ecosystem-producers, consumers and decomposers; Ecological succession; food chains, food webs and ecological pyramids; Ecosystem types – characteristics features, structure and functions of forest, grassland, desert and aquatic ecosystems, Industrial Ecology and Recycling Industry. Introduction- biodiversity at genetic, species and ecosystem levels; Bio-geographic classification of India; Value of diversity– Consumption use value, Productive use value, Social, Ethical, Moral, aesthetic and optional value if diversity; India as mega-diversity nation

Unit III: Human population & environment - Global population growth, variations among nations. Population explosion, Family welfare Programmes-methods of sterilization; Urbanization, Environment & human health-climate and human health, infectious diseases, water related diseases, risk due to chemicals in food, Cancer and environment. Human rights –Equity, Nutrition and health rights, intellectual property rights (IPRS), HIV/AIDS; Women and children Welfare; Information technology in environment and human health. Application of carbon rating and its uses.

Unit IV: Global Warming & Environmental Education - Global Warming Problem, Implications, Concept of Carbon Credit, Role of Government and Non-Government Agencies & Businesses. Environmental Education - Objectives, Principles, Scope and functions of environmental education. Role of NGOs.

Unit V: Social issues and environment - Construction of dams: problems and concerns of resettlement, rehabilitation of affected people; Environmental ethics– issues and possible solutions, resource consumption patterns and need for equitable utilization; Equity disparity in western and eastern countries; Urban and rural equity issues; Need for gender equity; Public awareness–Using an environmental calendar of activities. Environmental Economics- Estimation of Costs and Benefits- Cost-Benefit Analysis.

Unit VI: Environment legislation & Institutions - Environmental (protection) Act, The water (prevention and control of Pollution); The wild life protection Act; Forest conservation Act; Issues involved in enforcement of environmental legislations; Environment Impact Assessment; Environmental Auditing; Clearance / Permission for establishing Industry. Ministry of Environment and Forest, Central Pollution Control Boards, State Pollution Control Boards, Local Bodies- their scopes, organizational and functional issues.

Suggested Readings:

1. A text book of environmental by K M Agrawal, P K Sikdar, S C Deb”, published by Macmillan
2. Environment management by N K Uberoi”, published by Excel Books
3. Environment management by Dr. Swapan Deb”, published by Jaico Publishing House.
4. Environmental Management by S K Agrawal”, published by A.P.H. publishing Corporation.
5. Environmental Studies by Rajagopalan- Pub. By Oxford.
6. Environmental Policy – By. James Lester, Duke University Press
7. Environmental Management System ISO 14001 – By Dr. Ashok Joshi, L. Ramkrishnan,Nivedita Sarnaik

Paper C23: Cost & Management Accounting

Unit I Introduction to Cost and Management Accounting: Meaning of Cost, Costing and Cost Accounting, Features, Scope and Functions of Cost Accounting, Advantages and Limitations of Cost Accounting; Concept of Cost; Analysis and Classification of Costs; Elements of Cost; Introduction to Management Accounting, importance and scope of management of Accounting, tools and techniques of management accounting Management accounting Vs. Cost accounting vs. financial accounting, role of accounting information in planning and control

Unit II Unit Output Costing & Reconciliation of Cost and Financial Accounts: Preparation of Cost Sheet (Statement of Cost); Quotations and tender. Introduction; need for reconciliation, reasons for disagreement in Profit; Procedure/Methods of Reconciliation; Reconciliation Statement;

Unit III Contract and Operating Costing: Silent clauses and accounting features of Contract costing, Retention money clause and Escalation clause, Profit of uncomplete Contract, WIP in balance sheet. Features of operating costing: Transport costing (Standard charge, running and operating cost, maintenance charges and log sheet), Canteen, Hospital and hotels Costing.

Unit IV Ratio Analysis: Introduction, Meaning of Ratio; Mode of Expression; Steps in Ratio Analysis; Importance of Ratio Analysis; Nature of Ratio Analysis; Limitations of Ratio Analysis; Classification of Ratios; Balance Sheet Ratios; Revenue Statement Ratios; Activity of Turnover Ratios; Profit Cover Ratios; Du pont Chart; Miscellaneous Practical Problems.

Unit V Financial Analysis-I: Meaning of Fund; Meaning of Fund Flow; Objective of Fund Flow. Statement of Changes in Working Capital, Funds from Operations paid cost and unpaid costs. Distinction between cash profits and book profits. Preparation and analysis of cash flow statement and funds flow statement.

Unit VI Budgets and Budgetary Control: Concept of Budget; Objectives of a Budget; Budgetary Control; Characteristics, Advantages and Limitations of Budgetary Control; Master Budget; Classification of Budgets; Long Term Budget; Short Term Budget; Fixed and Flexible Budget; Sales Budget; Production Budget; Material Budget; Labour Budget; Capital Expenditure Budget; Cash Budget; Preparation of Flexible Budget and Cash Budget; Zero Base Budgeting.

Suggested Readings:

1. Cost and Management Accounting V. K. Saxena & C. D. Vashist, Sultan Chand & Sons Publication.
2. Management Accounting, Bhagwati & Pillai, Second Edition, S. Chand & Company Ltd.
3. Cost Accounting Theory and Practice, Bhahatosh Banerjee, PHI
4. Cases In Management Accounting & Control System, Allen, Pearson
5. Cost & Management Accounting, Ravi M Kishore, Taxmann Publications Pvt. Ltd.
6. Management Accounting: Theory and Problems, M.Y.Khan, P.K. Jain, TMH
7. Cost Accounting : Dr R.P. Ingole Das & Ganu
8. Management Accounting: Dr R.P. Ingole Das & Ganu

Paper C24: Entrepreneurship Development

Unit I: Foundations of Entrepreneurship Development: Concept and Need of Entrepreneurship Development Definition of Entrepreneur, Entrepreneurship, Innovation, Invention, Creativity, Business Idea, Opportunities through change. Concepts of Entrepreneur, Manager, Intrapreneur / Corporate Entrepreneur –comparative study - Roles, Responsibilities, Career opportunities. Entrepreneurship as a career, Entrepreneurship as a style of management, The changing role of the entrepreneur: mid career dilemmas – Closing the window: Sustaining Competitiveness - Maintaining competitive advantage.

Unit II: Entrepreneurship Trends - Forms of Ownerships, Franchising, Types of Entrepreneurship, Career Planning, Choice of Entrepreneurship as a Career, Cases from Indian Industry. The ED Cycle, Identifying & Developing Entrepreneurial Potential, Techno economics innovation and entrepreneurship, Socio-psychological factors influencing entrepreneurship development.

Unit III: Business Idea and Business Plan -, Creativity and Innovation, Business Ideas Generation Process, Evaluation of Business Idea. Building the Business Plan, Venturing an Enterprise, Financial Considerations (Cash Flow Management, Financial Plan, Business Plan). Role of chamber of commerce, industries associations and other bodies like, FICCI, CII, TIE, DICCI etc.

Unit IV: - Registration of new venture and Support Systems - Steps and processes involved in setting up a manufacturing unit and a service unit. Process of registration and formalities; Activities of SIDBI, EDI, NIESBUD, DIC, NABARD Government policy, Agency supporting entrepreneurial development Industrial estates. Role of MSME, MITCON, MIDC and MCED.

Unit V: The Industry and Ancillarization: Role of Intrapreneurship in Indian industry; Success cases, Ancillarization, Ancillarization in India, Ancillaries & Industrial Development, Ancillary Opportunities in different Economic Sectors: Agro Industries, Logistics, BPO, Banking and Finance, Sub-contracting System, Supplier Organization Network Global Aspect of Entrepreneurship. NGOs and entrepreneurship.

Unit VI: DPR and Financial incentives: Preparation of DPR, Format and contents of a DPR, Bank financing and formats, Document and clearances required by nationalized banks, SCBA; Schemes for educated unemployed, Fiscal incentives, Procurement of industrial equipment, marketing support. Role of KVIC and Government schemes of financing.

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Suggested Readings:

1. Dynamics of Entrepreneurship Development – Vasant Desai.
2. .S.S. Khanka – Entrepreneurial Development (S. Chand & Co.)
3. Entrepreneurship Development New Venture Creation – Satish Taneja, S.L.Gupta
4. Entrepreneurship 6 th edition. Robert D Hisrich , Tata McGraw-Hill.
5. Kuratko- Entrepreneurship – A Contemporary Approach, (Thomson Learning Books)
6. Small-Scale Industries and Entrepreneurship. Desai, Vasant (2003). Himalaya Publishing House, Delhi.
7. Chary – Business Gurus speaks (Macmillan)

Paper C25: Business Research

Unit I: Introduction - Meaning, Objectives and Types of research, Research Approach, Research Process, Relevance & scope of research in management.

Unit II: Problem Identification & Formulation – Management Question – Research Question – Investigation Question – Measurement Issues - Hypothesis – Qualities of a good Hypothesis –Null Hypothesis & Alternative Hypothesis. Hypothesis Testing - Logic & Importance

Unit III: Research Design - Features of good Design, Types of Research Design, Basic principles of experimental Design, Use of advanced technology in Research Design, Role of Research analyst.

Unit IV: Measurement & scaling techniques - Concept of measurement– what is measured? Problems in measurement in management research - Validity and Reliability. Concept of Scale – Rating Scales viz. Likert Scales, Semantic Differential Scales, Constant Sum Scales, Graphic Rating Scales – Ranking Scales – Paired Comparison & Forced Ranking.

Unit V: Methods of data collection & data Analysis - Primary data – questionnaire and interviews; Collection of secondary data; Use of computer and Information technology in data collection. Data Preparation – Univariate analysis (frequency tables, barcharts, pie charts, percentages), Bivariate analysis – Cross tabulations and Chi-square test including testing hypothesis of association.

Unit VI: Testing of hypothesis, Interpretation of data& Report Writing - Procedure for hypothesis testing; Use of statistical techniques for testing of hypothesis. Techniques of Interpretation, Report writing, Layout of a project report, preparing research reports.

A Survey based mini-project should be undertaken by the students to orient them about basics of research.

Suggested Readings:

1. Business Research Methods - Donald Cooper & Pamela Schindler, TMGH, 9th edition.
2. Business Research Methods – Alan Bryman & Emma Bell, Oxford University Press.
3. Research Methodology - C.R. Kothari
4. Zikmund : Business Research Methods, (Thomson Learning Books)
5. Marketing Research, G C Beri third edition (McGraw Hill)
6. Dwivedi – Research Methods in Behavioural Science (Macmillan)
7. Bennet, Roger : Management Research, ILO, 1993
8. Salkind, Neil J. : Exploring Research, (Prentice – Hall, 1997)

Paper C26: Financial Management

Unit I: Introduction - Concept of business finance, finance function, scope, Responsibilities of finance executive, Goals & objectives of financial management, **Sources of financing** - LONG TERM: shares, debentures, term loans, lease & hire purchase, retained earnings, public deposits, bonds (Types, features & utility); SHORT TERM: bank finance, commercial paper & trade credit & bills discounting.

Unit II: Capital structure - Concept, meaning, principles & importance. Introduction to Trading on equity, Capital gearing & leveraging, Cost of capital, Cost of different sources of finance, Weighted average cost of capital, Over capitalization – Concept, Symptoms, causes, Consequences & remedies, Under capitalisation - Concept, causes, Consequences & remedies, Watered Stock, Watered stock Vs Over capitalization

Unit – III: Capital budgeting - Concept of time value of money, Compounding & discounting; Future value of single amount & annuity, present value of single amount & annuity; Practical application of time value technique. Nature and significance & techniques of capital budgeting – Pay Back Method, Accounting rate of return, Net Present Value, IRR and profitability index.

Unit IV: Working capital - Concept, significance, types. Adequacy of working capital, Factors affecting working capital needs, Financing approaches for working capital, Methods of forecasting working capital requirements. Estimate of working Capital requirement, Working capital finance from banks

Unit V: Dividend policies - Concept, determinants and factors affecting, relevance and irrelevance concept, dividend valuation models – Gordon, Walter and Modigliani-Miller models Stability of dividends – concept and significance.

Unit – VI: Corporate restructuring - Reasons & drivers of restructuring, Methods of restructuring-mergers, takeovers, acquisitions, divesting, spin-off, split ups, privatization, buyback & joint ventures.

NB: Numerical shall be based on Unit II, Unit III, Unit IV, Unit V only.

Suggested Readings:

1. Financial Management by Ravi Kishore, Taxmann's.
2. Financial Management by S. M. Inamdar, Everest Publishing house, 12th Edition 2004.
3. Financial Management by Sharma & Gupta, Kalyani Publishers.
4. Financial Management by R.M. Srivastav, Kalyani Publishers.
5. Financial Accounting for Management by P. Shah- Pub, by Oxford
6. Financial Management by Dr. R. P. Rustagi.

Paper C27: Strategic Management

Unit I: Strategic management - Introduction to strategic management, Strategic decision making, Strategic management process; Difference between Policy, Strategy and Tactics.

Strategic Intent - Vision, Mission & goals, Preparation of Vision & Mission Statement; Organisational objectives, Hierarchy of objectives & strategies, setting of Objectives.

Unit II: Internal, External & Resource analysis - SWOT analysis, Resource analysis- a) Organisation capabilities & competitive advantage b) Value chain analysis; Concept of synergy -Core competency, Competitive analysis - Interpreting the five forces model, Competitors analysis

Environment analysis a)Components of External environment b)Components of Internal environment c)Environmental scanning. **Industry Analysis** a) A Framework for industry analysis b)Michael Porter's Analysis c)Usefulness of industry analysis.

Unit III: Strategy Formulation (Case study) - Corporate level strategy: A) Growth-Concentration, Horizontal, Vertical, B) Diversification- Concentric, conglomerate. C) Expansion through Cooperation; Merger, Acquisitions, Joint ventures & strategic alliances D) Stability -Pause/proceed with caution, No change, Profit strategies. E) Retrenchment -Turnaround, Captive Company Strategy, Selling out Bankruptcy, Liquidation.

Unit IV: Business Level strategy & Functional level strategy - A) Business Level strategy- Competitive advantage, Low cost strategy, Differential strategy and Focus strategy, B) Functional level strategy - Operations strategy, Marketing strategy, Financial strategy, Human Resource strategy.

Unit V: Portfolio Approach & analysis - a)Portfolio analysis, advantages & disadvantages, b)BCG Matrix c) General Electric's Business Screen, d)Life cycle or Arthur D Little matrix, e) Balance scorecard.

Unit VI: Strategic Implementation, Strategic evaluation, Control & continuous Improvement - 7 s framework- (separate variables in details), Strategic Business Unit (SBUS), Merits & Demerits of SBU; Leadership, Power & organisation culture.

Strategic evaluation, Control & continuous Improvement - Establishing strategic evaluation & control; The quality imperative: continuous Improvement to build customer value, Fundamentals of Six sigma approach for continuous improvement.

Suggested Readings:

1. Strategic Planning & Formulation of Corporate Strategy, V S Ramaswami, S Namaumari, Publication- Macmillan, India.
2. Strategic Management ,9 th Edition – John A Pearce II, Richard B Robinson, Jr Publication-Tata McGraw- Hill Publishing Company Limited, New Delhi.
3. Crafting & executive strategy -14 th edition, Arthur A. Thompson Jr, A.J. Strickland III, Publication-Tata McGraw- Hill Publishing Company Limited, New Delhi.
4. Management Policy & strategic Management – R.M. Srivastava Publication – Himalaya Publishing House.
5. Global Strategic management – Kamel Mellahi, J. George Frynas, Paul Finlay Publication-Oxford University Press, New Delhi.

Paper C28: Technology and R & D Management

Unit I: Basic Concept : Introduction; Role & Important of Technology Management; Technology Management in India; dimension of Technology Management; Technological Change; Technological Life cycle; Diffusion & Growth Transformation; Alternatives; Technological policy instruments.

Unit II: Technological Planning – Technological Development ; Option and Strategies; Technological & Socio-economic Planning; Production Function & Technological Change; Nature of Technological Change; I.T revolution; Macro effects of Technological change

Unit III: Technology Forecasting & Technology innovation Chain; Technology Forecasting approaches & method; Problems & pitfalls in technology forecasting; Technology strategy; Technology generation; Technological development cycle; Models of technology transfer; Dimension, features of technological package; Routes of transfer; Technological absorption capabilities; Pricing issues, Transfer agreements.

Unit IV: Technological dependence ; Technology absorption; Constraints in technology absorption, Import of technology in India; Management of technology absorption; TAAS; Technology Assessment; Evaluation; Technology evaluation parameters.

Unit V: Diffusion of Technology : Concept of diffusion of technology; Importance of diffusion; Major activities; Diffusion strategy, Taking technology to market; Technology financing issues; Financial evaluation & criteria of evaluating R & D projects; Technology Promotional activities.

Unit VI: Technology information, contents, sources, dimension; Technology strategy for enterprise; technology gap & enterprise needs; Evaluation of technological option & routes, R& D organization & its role; Development & training of Human Resources.

Suggested Readings:

1. Ford – Managing & marketing Technology (Thomson Learning books)
2. Sahay- World Class manufacturing (Macmillan)
3. Dwivedi .O.P – Perspective on Technology & Development, Gitanjali Pub.
4. Mcnon K.S.V – Technological Transfer : Concepts; Modalities & Cases, Golden Pub.
5. Liowe, Julion- Innovation & Technology transfer for growing firm, Pergohon Press pub.
6. Bentz & Fredrick- Managing Technology, Prentic hall Pub.
7. Sharif & Nawaz – Management of Technology transfer & Development, APCTT Pub. Banglore
8. Allen Thomas – Managing the flow of technology, MIT Press.
9. P.K.Rohatgi & B. Bowonder – Technological Forecasting , TMII.

Paper C31: Applied Operations Research

Unit I: Game Theory - Terminology, Game Models, Two Person Zero Sum Games and their Solutions, Graphical Method, Algebraic Method, Arithmetic Methods, Methods of Matrices.

Unit II: PERT/CPM - Rules of Network Construction, Network Analysis (Forward Pass, Backward Pass, Critical Paths and Floats). Resource Analysis and Allocation (Crashing), Probability in PERT, PERT vs. CPM.

Unit III: Replacement - Replacement Policies: Equipment Deteriorate Gradually, Time Value of Money Considered. Equipment Fail Suddenly (Group Replacement), Staff Replacement.

Unit IV: Sequencing - Introduction, Terminology & Assumptions, Processing 'n' jobs through 2, 3 and 'm' machines.

Unit V: Simulation - Introduction, Simulation Process, Monte Carlo Simulation, Generation of Random Numbers, Queuing Model [M/M/1: (∞ /FCFS)], Simulation of Queuing System. Simulation of Inventory System, Simulation of Investment Problems, Advantages and Disadvantages of Simulation, Applications of Simulation.

Unit VI: Dynamic Programming - Concept, Dynamic Programming & Resource Allocation, Dynamic Programming vs. Linear Programming. **Application of Computer in ORT** - Introduction, Packages, Practical Use of these Packages.

Suggested Readings:-

1. Introduction to Operations Research- Hillier & Liberman – McGraw Hill
2. Quantitative Techniques in Management by N. D. Vohra – Tata McGraw Hill
3. Operations Research - Paneersevam – Prentice Hall of India
4. Operations Research – J. K. Sharma - McMillan
5. Operations Research – Hira and Gupta – S. Chand & Co.

Paper C32: Business Ethics & Corporate Governance

Unit I: Business Ethics: Introduction, Concepts and theories: Introduction, definitions, importance and need for Business ethics, Values and morals. Management and ethics, Normative Theories, – Gandhian Approach, Friedman’s Economic theory, Kant’s Deontological theory, Mill & Bentham’s Utilitarianism theory.

Unit II: Business & Organisational Ethics: The Indian Business scene, Ethical Concerns, LPG & Global trends in business ethics, Business ethics rating in India. Organizations & Organisation culture, Types of Organization, Corporate code of ethics – Formulating, Advantages, implementation Professionalism and professional ethics code.

Unit III : Corporate Governance : Introduction, mechanisms and systems of corporate governance, Indian model of Corporate Governance, OECD principles, World Bank on Corporate Governance, McKinsey Survey on CG, Indian Committees and guidelines.

Unit IV: Corporate social Responsibility: Introduction, Models for implementation of CSR, Advantages, Scope, and steps to attain CSR, Prestigious awards for CSR, CSR & Indian Corporations-A Score Card, Future of Indian CSR

Unit V: Environment Ethics, Marketing Ethics & Ethics in HRM : India’s Environment Policy, Environment Risk Management, Environment Audit, Areas in Marketing Ethics ,Beyond the 4P’s, Role of HR in creating an ethical organisation.

Unit VI: Globalisation & Business ethics: Growth of Global Corporations, Factors facilitating Globalisation, Impact of globalization on Indian corporate and social culture, Advantages and disadvantages of MNC’s to the Host Country, International codes of Business Conduct, Whistle blowing and its codes.

Suggested Readings:

1. Business Ethics – Concept & Practice - B. H. Agalgatti & R. P. Banerjee – (Nirali Publication)
2. Ethics in Business & Management - R. P. Banerjee (Himalaya Publication)
3. Business Ethics. by Crane – Pub. By Oxford Press
4. Corporate Governance & Business Ethics – (Text & Cases), U. C. Mathur, Macmillan India Ltd.
5. Business Ethics, C S V Murthy, Himalaya Publishing House
6. Business Ethics & Corporate Governance, by A.C.Fernando

Paper C33: Project Management and Quality Management

Unit I: Introduction to Project Management - Concepts of Project and Project Management; Project Life Cycle, Project Stakeholders; Organizational Influences

Unit II: Knowledge Areas I & II – Process Flow Diagram; Plan, Direct, Manage, Monitor, Control and Close a Project. Scope; Time Management: Activity Sequencing, Resource and Duration Estimation; Cost vs. Quality Management in Projects.

Unit III: Procurement and Risk Management – Planning Purchase and Contracting; Select Sellers; Contract Administration and Closure; Qualitative vs. Quantitative Risk Analysis; Risk Monitoring and Control.

Unit IV: Introduction to Quality Systems - Overview of quality, history of quality, competitive advantage, industrial perspective, total quality system, Taguchi “Loss Function” concept; **Statistical Process Control:** Process Control Chart calculations, Extraction of information, Capability Index, Individual and Moving Range Charts, Implementation of Statistical Process Control, Control Charts for Attributes, Numerical.

Unit V: Strategic Quality Management - Total Quality Management (TQM), Implementation of TQM, **Reliability Health and Safety:** Defining Reliability, Product Life Characteristic Curve, Reliability Function, Reliability Engineering. Classification of Hazards, Codes of Practice, Company Safety Statement.

Unit VI: Quality Techniques, Standards and Certifications - Indian Quality Standards, Japanese vs. American Techniques, KAIZEN, **Six Sigma:** Design, Measure, Analysis, Improve and Control Phases; TOYOTA WAY. ISO 9000, ISO 14000, BS 7799 ISMS, TS; Agency Inspection Services: BSI (UK), VDE (GERMANY), NSAI (IRELAND), UL (US), MHSA (US) and BIS (INDIA); NABCB: National

Accreditation Board for Certification Bodies; BVQI: Bureau Veritas Quality International and TÜV.

Suggested Readings:

1. Project Management, A Managerial Approach, Meredith and Mantel, John Wiley and Sons, Fifth Edition, 2003. Course Text.
2. The New Project Management, J. Davidson Frame, Jossey-Bass, 1994.
3. The Management and Control of Quality: J.R. Evans, W.M. Lindsay: West Publishing Company 1996, ISBN0314472851
4. Introduction to Quality Control: Kaoru Ishikawa; Chapman and Hall 1992 ISBN 0412435403
5. Introduction to Statistical Quality Control; D.C. Montgomery, John Wiley & Sons, ISBN 047108459x

Paper C34: Public System Management

Unit I: Introduction & Public Enterprise Management - Understanding the state of the economy, Government & public welfare, Concept of Public Goods & services, Concept of Public System, Role of Government in Public System, Types of Public system, Weaknesses & Issues of the Public System in India. Objectives and Roles of Public Enterprise, Public Enterprise Policy and Reform Measures, Marketing Problems of Public Enterprises; Cases: Western Coalfields Limited (WCL), MECL, MOIL and MSEB etc.

Unit II: Energy & Water Resource Management - Organisation for Energy Management: Goal setting in Energy Management; Energy crisis, energy use Patterns and scope for Conservation; Energy Audit, Energy Pricing; Non conventional sources of energy; The option of Nuclear energy in the developing countries; Case: Suzlon. Objectives and organization of water resource Management; Optimization techniques for water resources projects; Scientific utilization of Agriculture water; irrigation projects; Water crisis management flood and droughts; Water harvesting; Cases: Jalswaraj by Govt. of India, Sardar Sarovar, Bhakra Nangal and Maharashtra Jivan Pradhikaran.

Unit III : Management of Education System - Education as Development Priority; Education and Economic growth; International Comparisons; Strategies of Development of Education System; Concept of Investment in Man; Systems of Education in India: Formal, informal, Primary, Secondary and Higher Education; Cases: Ivy League, Yale, IIT's and IIM's.

Unit IV: Management of Telecommunication systems - Role of Telecommunication; Effects of technology and scale on cost of service, Organization, management and financing in Telecommunication; Mobilizing resources for expansion, Impact of Telecommunications on rural development, Cases: BEL, C-DOT, DoT, BSNL and Telecom Commission.

Unit V: Public Infrastructure Management- Organizational Studies and Infrastructure Developments from Road Transport, Railways, Power, Airports and Shipping Ports like PWD, MSRDC, Central Railway, DLF, GMR, GVK, TATA Energy and Reliance Energy etc; Profile Study: RC Sinha (Mumbai-Pune Expressway), T. Chandrashekhar (Administrative Reforms), S. Sreedharan (Konkan Railway), Vilasrao Salunkhe (Pani Panchayat) and MS Swaminathan (Gender Divide) etc

Unit VI : Emerging Trends - Privatization, Public Private Partnership (PPP) - concept, Role of PPP in development of Public systems, Strengths & weaknesses of privatization & PPP; PPP Agreements in India; Infrastructure scenario in Nagpur: SEZ, MIHAN, MADC, NIT, NMC (SETU), MRSAC (Maharashtra Remote Sensing Application Center) etc.

Suggested Readings

1. "Ideas that have Worked" by Department of Administrative Reforms and Public Grievances, 2004, Penguin / Viking, New Delhi
2. "Infrastructure Management: Design, Construction, Maintenance, Rehabilitation, Renovation." Hudson, Haas, and Uddin, McGraw-Hill, 1997
3. Bureau of Public Enterprises. Public Enterprises Survey, 1994-95, New Delhi, 1996
4. Donglass, C. "Energy Technology Handbook". McGraw Hill, New York. 1977
5. Chaturvedi, T.N. (ed) "Training in Public Administration: The changing Perspectives". 1989. The Indian Institute of Public Administration, New Delhi
6. Chatuvedi, M.C. and Rogers P. "Water Resources Systems Planning: Some Case Studies for India. Indian Academy of Sciences, Bangalore, 1995.

Specialization

Group A: Marketing Management

Group A: SP01: Retail & Services Marketing

Unit I

Retail marketing and retail management, strategic retail marketing, retail marketing mix, CRM and retail marketing, CBB & retail marketing

Unit II

Retail location & related strategies, retail store operations, retail organizations & structure, applications of IT in retail, retail distribution and SCM

Unit III

Retail pricing and promotional pricing, retail branding strategies, store & non-store brands, merchandising and warehousing, global retailing, modern trade and new trends in retailing

Unit IV

Services, nature, characteristics, service product & pricing, service positioning, pricing services

Unit V

CRM and services, managing service quality, CBB and services marketing, service demand management, promoting & services

Unit VI

MIS & research for services, demand analysis for services, managing service processes, service distribution, employees (people) and services marketing

Suggested Readings:

1. Retail Marketing Management – David Gilbert
2. Retail Marketing – A Sivakumar
3. Retail Marketing – P Mcgoldrick
4. Retail Management – Barry Berman/ Joel R Evans/ Mini Mathur
5. Services Marketing – K Rama Mohan Rao
6. Services Marketing - Alan Wilson, Valarie Zeithaml, Mary Jo Bitner, Dwayne Gremler
7. Services Marketing – Christopher Lovelock/ Jochen Wirtz/ Jayanta Chatterji
8. Services Marketing – Harsh Verma
9. Principles of Services Marketing – Adrian Palmer

Group A: SP02: Product Management & Brand Management

Unit I

Product Life Cycle and its variants, levels of a product, product mix, product portfolio decisions, BCG matrix and its applications.

Unit II

Product planning, new product development process, Innovation and Creativity, product testing, product placement & commercialisation, conducting financial cost benefit analysis and its tools.

Unit III

Introduction to brands, branding and brand management, brand research and brand equity, branding for different product categories, branding & differentiation, brand image, brand element and brand association.

Unit IV

Brand equity measurement, competitive analysis, brand positioning, brand hierarchies and brand portfolio analysis.

Unit V

CBBE (Customer based brand equity), Branding & IMC, branding and marketing mix, branding and product mix, brand attributes, branding and segmentation.

Unit VI

Developing brand strategies, brand image and awareness, brand equity systems, brand value, brand extensions, brand roadmap, sustaining and managing brand equity and global branding.

Suggested Readings:

1. Product Strategy & Management – M Baker & S Hart
2. Strategic Brand Management – K Keller, MG Parameswaran, Isaac Jacob
3. Expert Product Management – Brian Lawley
4. 42 Rules of Product Management – Greg Cohen
5. The Product Manager's Handbook – Linda Gorchels
6. Building Strong Brands – David Aaker
7. Managing Strong Brands – David Aaker
8. Branding Unbound – Mathieson
9. United we Brand - Moser

Group A: SP03: Consumer Buying Behavior & Integrated Marketing Communications

Unit I

Concept of consumer personality & brand personality as related to STP, buying influences on consumers and organizational buyers, consumer motivation, perception, learning & attitudes.

Unit II

Reference groups, buying process, factors influencing buying decisions, models of buying behavior, post purchase behavior.

Unit III

Marketing research, methods of research and research process, data collection techniques, sources of secondary data for marketing decisions, relevance of secondary data, marketing metrics.

Unit IV

IMC definition, scope, elements, role, etc., models of IMC, media and media planning, IMC strategy and process, new media

Unit V

IMC and brand communication process, role of advertising in branding process BTL, OOH, etc., promotions in IMC – consumer, trade sales, co-branding, in-branding, etc.

Unit VI

Creativity and innovation in IMC, packaging and labeling in IMC, PR and ethics in PR, corporate communications, International communications, cross cultural issues in IMC.

Suggested Readings:

1. Consumer Behaviour – Schiffman, Kanuk & Kumar
2. Consumer Behaviour & Branding – Kumar
3. Integrated Advertising, Promotion & Marketing Communications – Clow & Baack
4. Advertising – Jafkins
5. Advertising Management – R Batra, J Myers, D Aaker

Group A: SP04: Advanced Marketing Techniques

Unit I

Global marketing, country analysis & study of global /emerging markets, market entry and global sourcing strategies, global marketing using internet.

Unit II

Strategic Marketing Process, types of strategies like follower, leader, etc., value chain analysis and value creation strategies, growth strategies.

Unit III

Nature & scope of rural markets, characteristics of rural customers and buyer profile, marketing to cooperatives, channels of distribution in rural India.

Unit IV

Marketing Engineering: Customer value assessment and valuing customers, marketing response models.

Unit V

Inbound marketing, qualification of opportunities, reverse marketing, up-selling, down-selling and cross selling techniques.

Unit VI

Business marketing, characteristics of business markets, organizational buying behaviour, pricing and negotiations, B2B channel management, IMC for B2B marketing

Suggested Readings:

1. Global Marketing – Douglas Lamont
2. Global Marketing Management – Warren J Keegan
3. Strategic Marketing – David W Cravens & Nigel Piercy
4. Rural Marketing – Pradeep Kashyap
5. Marketing Strategy – A Ranchhod & Calin Gurau
6. Marketing Strategy & Competitive Positioning – G Hooley, Nigel Piercy, B Nicouland
7. Contemporary Direct & Interactive Marketing – L Spiller & M Baier
8. Marketing Engineering – Gary L Lilien, Arvind Rangaswamy & Arnaud De Bruyn
9. B2B Marketing – Steve Minett
10. The DNA of Marketing – Ira Kalb

Group A: SP05: Rural Marketing

Unit I: Introduction to Rural Marketing - Meaning, Scope, definition & importance, Rural versus urban mindsets, Growth of rural markets, Basic differences between rural, semi urban and urban markets.

Unit II: Rural Market Research & Segmentation - Research, Location for Conducting Research, Classification of Rural Consumer based on economic Status, Basis of Market Segmentation, Multi-Attribute Segmentation.

Unit III: Classification of Markets - Regulated Market, Defects/Problems of Regulated Market, Role of Regulated Markets on Marketing of Agricultural Produce, Significance of Regulated Markets to Agriculturists.

Unit IV: Rural Marketing Strategies - Product Strategies, Pricing Strategies, Distribution Strategies, Production Strategies, Methods of Sale, Hatha System, Private Negotiations, Quotations on Samples, Dara and Moghum Sale Methods, Open Auction Method.

Unit V: Role of Government in the Development of Agricultural Marketing - Government Intervention in Marketing System, Role of agencies like, Council of State Agricultural Marketing Boards, (COSAMB), State Trading, Cooperative Marketing, Types of Cooperative Marketing Societies, Cooperative Processing, National Agricultural Co-operative Marketing Federation (NAFED), National Co-operative Development Corporation (NCDC), Public Distribution system (PDS), Food corporation of India, Directorate of Marketing and Inspection (DMI), National Institute of Agricultural Marketing (NIAM), Self help Groups (SHG's).

Unit VI : Agricultural Credit and Crop Insurance & Role of IT in Rural Marketing - Agricultural Credit Policy, Institutional Agreements for Agricultural Credit, Crop Insurance, Agricultural Insurance. Infrastructure, Importance & Scope, Modern techniques for rural distribution. Case Study of ITC's "e-choupal" Initiative

Suggested Readings:

1. Rural marketing – Rajagopal
2. New perspectives on rural marketing – Ramkishen Y
3. Rural Marketing in India – K S Habeeb Rahman (Himalaya Publishing)
4. Rural Marketing in India by R. V. Bedi, (Himalaya Publishing)
5. Integrated Rural Development – R. C. Arora (S. Chand & Co.)

GROUP B: FINANCIAL MANAGEMENT

Group B: SP01: Advanced Financial Management

Unit I: Capital structure & Value of firm - Assumptions & definitions, NI approach, NOI approach, Traditional Position, MM position, Taxation & capital structure, Trade off theory, Signaling theory, EBIT-EPS Analysis

Unit II: Cash & Receivables Management - Motives of holding cash, factors determining the cash balance, Managing the cash flow, Options for investing surplus funds & strategies for managing surplus funds, Cash Management Models- The Baumol model, The Beranek Model, The Miller-Orr Model. Credit policies, Evaluating the debtors, Credit analysis & decision, Credit terms & collection policies, Control of accounts receivables, Heuristic approach

Unit III: Leasing, Hire-purchase & Project Finance - Types of leases, rationale for leasing, Mechanics of leasing, Operating lease, Leasing as financial decision, Lease Vs borrow & buy evaluation, Hire-purchase arrangement, Choice between leasing & hire purchase, Project finance – Private Equity, Venture Capital.

Unit IV: Risk Analysis in Capital Budgeting - Sources & perspective of risk, Sensitivity analysis, Scenario analysis, Breakeven analysis, Miller Model, Simulation analysis, Decision tree analysis, Corporate risk analysis, Managing risk, Project selection under risk, Risk analysis in practice.

Unit V: Valuation of business and Mergers & Acquisitions - Valuation of business- Adjusted book value method, value of shares and debt method, comparison method, DCF method. M&A – Exchange ratio Financial evaluation of mergers, M&A as capital budgeting decision, Economic value added & market value added Taxation aspects.

Unit VI: Contemporary issues in Financial Management –Public offerings - IPO, FPO, ASBA, book building, Reverse book building, private placement, Green shoe option, Red Herring Prospectus. ESOP, ESPP, Refinancing, Securitization, Private equity, venture Capital, Carbon Credit, Sarbanes ‘Oxley Act, Balanced score card, Sub-prime crisis, P notes, GDR, ADR, ECB, Indian Depository Receipts, Hundi, Parta system,

NB: Numerical shall be based on Unit I, Unit II, Unit III, Unit IV, and Unit V only

Suggested Readings:

1. Financial Management- Ravi Kishore, Taxmann’s, New Delhi.
2. Financial Management: Problems and Solutions, Ravi Kishore, Taxmann, New Delhi
3. Financial Management – Theory & Practice by Prasanna Chandra, TMH Publishers 2004
4. Financial Management-I.M. Pandey, Vikas publishing house, New Delhi.
5. Financial Management & Policy – V. K. Bhalla – (Anmol Publication, New Delhi)
6. Strategic Financial Management – Dr. J.B. Gupta – Taxmann’s, New Delhi
7. Financial Management – Rajiv shrivastava , Anil Misra – Oxford Higher Education.
8. Financial Management – M. Y. Khan & P. K. Jain – Tata McGraw Hill Education Pvt. Ltd. 6th Edition

Group B: SP02: Risk Management and Derivatives

Unit-I: Risk, Return and Market Indices- Types of Risk; Significance of Beta, Beta versus Standard Deviation; Risk – Return Trade-Off, Understanding Interest rates, Understanding the Stock Index, Economic Significance of Index Movements, Index Construction Issues, Desirable Attributes of an Index – impact cost, Applications of Index. Construction and composition - Sensex and Nifty, Calculation of indices. Free float Market capitalization.

Unit-II: Introduction to Derivatives Trading and Settlement : Types of Derivative Contracts, History of Financial Derivatives Markets, Participants in a Derivative Market, Economic Function of The Derivative Market; Trading of Derivatives Contracts Futures and Options Trading System, The Trader Workstation, Futures and Options Market Instruments, Criteria for Stocks and Index Eligibility for Trading, Charges ; Clearing and Settlement - Clearing Entities, Clearing Mechanism, Settlement Procedure, Risk Management, Margining System

Unit-III: Option Derivatives and Trading Strategies using options – Types of Options - Call Options, Put Options; Option Pay-Offs; Terminologies used in the Options Market; Option Pricing – Binomial Model and Black & Scholes Model; Trading Strategies using options- caps, collars, butterfly, straddle, strangle etc. Option Greeks.

Unit-IV: Futures Derivatives and Trading Strategies using futures – Types of Futures – On the basis of Maturity, On the basis of the underlying asset; Margining in the Futures market; Terminologies used in the Futures Market; Futures Pricing – Cost of Carry Model; Trading Strategies using futures.

Unit-V: Foreign Exchange risk & Corporate Exposure Management – Types of Exposure – Transaction, Economic and Translation; Foreign Exchange Risk – Types, Risk Management Techniques – External and Internal. International portfolio diversification and transfer pricing, Risk Management practices in India.

Unit-VI: Swaps and Credit Derivatives – Concept and Characteristics; Types of Swaps – Interest Rate Swaps and Currency Swaps; Structure of Interest Rate Swaps and Intermediated Interest Rate Swaps; Relation between Interest Rate Swaps and Forward Rate Agreements; Calculations on Swaps. Concept of Credit Derivatives; Evolution and the Global Scenario; Types – Credit Default Swaps, Total Return Swaps, Credit Options, Credit Linked Notes. RBI guidelines.

NB: Numerical shall be based on Unit I, Unit III, Unit IV, Unit V and Unit VI only.

Suggested Readings:

1. Strategic Financial Management – Dr. J.B. Gupta – Taxmann’s, New Delhi
2. Financial Management – Rajiv Shrivastava , Anil Misra – Oxford Higher Education
3. Financial Management- Ravi Kishore, Taxmann’s, New Delhi.
4. Financial Management: Problems and Solutions, Ravi Kishore, Taxmann, New Delhi
5. Financial Management – Theory & Practice by Prasanna Chandra, TMH Publishers 2004
6. Financial Management-I.M. Pandey, Vikas publishing house, New Delhi.
7. Options Futures and other Derivatives – John C.Hull, PHI-EEE, 2011
8. Reference Material of NCFM from www.nseindia.com

Group B: SP03: Financial Services Management

Unit-I: Financial System- Financial markets [Money, Debt and Equity Markets]- structure, regulatory bodies- Role and functions–(RBI, IRDA, PFRDA and SEBI); Product features and uses (CP/CD, T bills, REPO, reverse REPO, dated securities, rated securities, equity shares) and participants – Role and functions (CCIL, FIMMDA, PDs, NSCCL, NSDL, CDSL.)

Unit-II: Banking Services and Operations -Definition of banks, Functions of Commercial Banks, Banking Structure in India, Role of RBI vis-a-vis other commercial banks, Introduction to Bank Deposits, Types of Deposit Accounts, Common guidelines of opening and operating accounts and KYC, Deposit Insurance, Principles of Lending and Loan Policy, Basics of Loan Appraisal, Credit decision-making and Review, Types of Advances- lien, pledge, hypothecation, mortgage, and charge, Management of Non Performing Assets; Bank Investment Policy, Statutory Reserve Requirements, Non-SLR Requirements, Concept of PLR, Base rate.

Unit-III: Insurance Services - Concept of insurance, principles of insurance, Traditional and Unit linked policies, individual and group policies, with profit and without profit policies, Different type of insurance products – whole life products, interest sensitive products, term assurance annuities, endowment, assurance. Medi-Claim and health insurance products - Different types of products available in the market, Salient features, Tax treatment General Insurance Products - Different types of products available in the market, Salient features.

Unit IV: Underwriting, Premium, and Claims – Insurance underwriting, underwriters Vs. Actuaries, factors to be considered in insurance underwriting, underwriting philosophy and guidelines, individual and group underwriting; risk analysis and evaluation, Classification of risks, methods of acceptance of risk, underwriting process, recent trends in underwriting; Claims – introduction, types, claim procedure – maturity, death, Surrender and rider; Other precautions during settlement

Unit V: Credit Rating Services – Introduction, regulatory framework, SEBI Credit Rating Agencies Regulation, Credit rating agencies in India, Credit rating process and methodology, CAMEL model, Rating symbols and grades, Significance, advantages and Limitations of credit rating.

Unit VI: Mutual Funds – Organization Structure, Classification of Funds –Types of Funds – Equity Funds, Debt Funds, Liquid Funds, Balanced Funds, Monthly Income Plans, ETFs, Commodity Funds, Fund of Funds, Real-Estate Funds; Calculation of NAV; Systematic Investment Plans; Concept of Cost Averaging and Value Averaging; AMFI; AGNI. Recent developments in the Mutual Fund industry.

NB: Numerical shall be based on Unit IV and Unit VI only

Suggested Readings:

1. Strategic Financial Management – Dr. J.B. Gupta – Taxmann’s, New Delhi
2. Financial Management – Rajiv Shrivastava , Anil Misra – Oxford Higher Education
3. Financial Management- Ravi Kishore, Taxmann’s, New Delhi.
4. Financial Management: Problems and Solutions, Ravi Kishore, Taxmann, New Delhi
5. Financial Management – Theory & Practice by Prasanna Chandra, TMH Publishers 2004
6. Financial Management-I.M. Pandey, Vikas publishing house, New Delhi.
7. Options Futures and other Derivatives – John C.Hull, PHI-EEE, 2011
8. Financial Institutions and Markets – L. M. Bhole – 4th Edition
9. Reference Material of NCFM from www.nseindia.com
10. Reference Material of NISM Mutual Fund Module from www.nseindia.com

Group B: SP04: Security Analysis & Portfolio Management

Unit I: Shares and their valuation – Features of equity, Methods of valuation, Valuation of goodwill, valuation of shares- asset backing method, EPS method, Market value, Yield based methods, Fair value of shares, Dividend discount models- with constant dividend, with constant growth, multistage growth models. P/E based valuation.

Unit II: Bond Valuation and Management – Types Of Bonds - Dated Securities And Zero Coupon Bonds; Strips, Bond Risks – Systematic And Unsystematic; Yield, Current Yield, YTM, Yield To Call, Term Structure Of Interest Rates, Theories Of Term Structure - Yield Curve, Sensitivity Of Bond Prices, Convexity Tenure, Term To Maturity, Duration And Modified Duration, Bond Management Strategies.

Unit III: Portfolio Theory - Risk and return for one security, two security and portfolio. Efficient frontier, Investor utility, Capital Market theory - Background, risk free asset, the market portfolio; capital asset pricing Model, systematic and unsystematic risk, CML, SML; Arbitrage pricing theory – empirical test of APT, Sharpe's Single Index Model.

Unit IV: Equity Portfolio Management - Passive v/s. Active, Value v/s. Growth, Fundamental analysis - Concept, process, Economy analysis, sector analysis, company analysis; Tools and techniques of fundamental analysis, business cycle and industry analysis. Preparation of equity research report.

Unit V: EMH and Technical Analysis - Need, EMH – forms, tests and results, Implications of efficient capital markets; Dow Theory, Random walk Hypothesis, Indian Markets and Efficiency. **Technical Analysis** – Fundamental Principles; Charts – Line Charts, Bar Charts, Japanese Candlestick Chart; Trends – Reversal of Trend, Flat Trends, Chart Patterns/Price Patterns – Reversal Patterns, Continuation Patterns; Moving averages – Simple and Exponential; Momentum analysis/Relative Strength Index (RSI); Bollinger Bands. MACD

Unit VI: Wealth Management - Investor life cycle and investment goals, Investment options available and their comparison, Portfolio management process. Rule of 72, Rule of 69, Asset Allocation Strategies – Integrated, Strategic, Tactical, Insured; Selecting appropriate allocation, Benjamin Graham's and Bogle's Strategic Asset Allocation Model, Jacob's 4 Step Program to developing a Model Portfolio, Evaluation of Portfolio performance - Treynor, Sharpe, Jensen, Sortino measure, Fama's Performance Measure, Fama's 3-Factor Model, Carhart's 4-Factor Model, Portfolio Style Evaluation and Portfolio Attribute Analysis. Strategies of Great Masters.

NB: Numerical shall be based on Unit I, Unit II, Unit III, Unit V and Unit VI only.

Suggested Readings

1. Investment Analysis and Portfolio Management by Prasanna Chandra, Tata McGraw Hill Publishers 1/E, 2002
2. Security Analysis and Portfolio Management, V.A. Avadhani, 2007, Himalaya Publishing House
3. Investment Science, David G. Luenberger, Oxford University Press.
4. Financial Management, R.P. Rustagi, Galgotia Publication House.
5. Investment – William Sharpe (PHI)
6. Financial Management by S. M. Inamdar, Everest Publishing house, 12th Edition 2004.

Group B: SP05: Corporate Taxation

Unit I: Definition of Income & Assesse, Previous year, Assessment year, Gross total income, Total taxable income, Residential status, Agricultural income.

Unit II: Distinction between capital and revenue receipts; Income from Business & Profession (excluding professional income) Income from capital gains and income from other sources relating to company assessee only. **Income from capital gains** and income from other sources relating to company assessee only.

Unit III: Income exempt from tax and Tax Planning - , Tax rebates, Deductions relating to company assessee only. Set off & Carry forward of losses, TDS, Self assessment tax, Filing of return. Concept, Tax Planning with reference to setting up of new business, Financial management decisions & Employees remuneration.

Unit IV: Special features of Indirect tax levies - All pervasive nature, contribution to Government revenues; instruments of planning, Development and fiscal performance; Constitutional provisions authorizing the levy and collection of duties of central excise, Customs and central sales tax.

Unit V: Central Excise Laws & Customs Laws - Basis of chargeability of duties of central excise-goods, Manufacture, Classification and valuation of excisable goods- specific issues and case studies; Assessment procedure, Exemption, Payment, Recovery and refunds of duties. Nature of customs duty, Types of customs duty, Classification for Customs and rate of duty, Valuation for customs duty, Provisions regarding baggage, Courier, Postal articles and stores.

Unit VI: Service Tax and Central sales tax - Provisions of law and procedures; VAT – concept, Applicability, Procedures involved and implications of the VAT. Scope of levy of Central Sales Tax; Inter-State sale, Sale outside a State and sale in the course of import and export-basic principles; Registration of dealers and determination of taxable turnover.

NB: Numerical shall be based on Unit II only.

Suggested Readings:

1. Ahuja, G. K. & Gupta, Ravi, Systematic Approach to Income Tax. Allahabad, Bharat Law House.
2. Datey V. S.: Indirect Taxes, Taxmann Publications, New Delhi
3. Bhagwati Prasad, Direct Taxes Law & Practice, Wishwa Prakashan.
4. Kanga, J. B. and Palkhivala, N. A., Income Tax, Bombay, N. M. Tripathi.
5. Singhania V. K., Singhania Kapil, Singhania Monica, : Direct Taxes Law and Practice, Taxmann Publications, New Delhi.

Group C- Human Resource Management

Group C: SP01: Performance Management & Compensation

Unit I: Job Evaluation / Grade Structure - a. Purpose and Methods of Job Evaluation, Ranking Systems, Job Classification / Grading method, Points System, Factor Comparison Method, Packaged Point Plans, Implementation; b. Job Analysis; Nature/Use, Methods, Job Identification Summary, Relationships, Responsibilities and Duties, Writing Job Specifications and Descriptions – Judgmental and Statistical Methods.

Unit II: Compensation Planning - Concepts, Nature and objectives of Compensation, Wages, Wage Fixation, Wage differentials, legal Status of Wages (basics), **Wages – Variable Compensation and Supplementary Compensation** – Perks, Fringe Benefits, Pay for Performance – Incentives.

Unit III: Competency Mapping / Workflow Mapping - Concept, Practical Application, Implementation

HR Scorecard / Balanced Scorecard - Introduction, Concept, Structure, Practical Application

Unit IV: Performance Management System - Introduction, Objectives, Tools, Methods of PA, Graphic Rating Scales, BARS, Alternation Ranking, Forced Distribution Method, Critical Incident Method, MBO, Assessment Centers, Group Appraisal; 360 deg Feedback, Appraisal Interview; Performance Planning and Potential Appraisal – Trait Based, Behavior Based and Result Based, Pitfalls.

Unit V: Career Management - Career Development Plan - Employee's and Employer's Role, Career Anchors, Nature of Careers, Career Problems – Low ceiling Careers, Career Mapping, Career Counseling, Succession Planning.

Unit VI: Ancillary Topics - Goal Setting, Promotions and Transfers; Separations- Retirement, VRS, Deputation, Death, Retrenchment, Pink Slips.

Suggested Readings:

1. Human Resource Management, by Snell / Bohlander Publication – Thomson
2. Compensation by Milkovich & Neman, 8 th edition. Publication – McGraw –Hill
3. Human Resource Management, by Gary Dessler Publication – Thomson
4. Accounting Practices in HRM by M. Kolay
5. Managing Human Resources by Monappa Publication – Macmillan

Group C: SP02: Training & Development Practices

Unit I: Training and Development - What is training? Nature of training, Significance of training, Importance of training, Scope & Objectives of training, Benefits of training, Philosophy of training.

Unit II: Training Need Analysis and Design - Identification of training needs, Environment for training, Areas of training, Responsibilities for providing training, Training Calendar, Facilities for training. **Training Design** - Perspectives for Designing Training, Designing a training programme, Objectives, components and methods of training designs, Training Process, Training of trainers (TOT).

Unit III: Training & Development Methods and Techniques - Approaches to Training, On the Job Training & Off the Job Training, Training Methodology – Case Study, Management Games, Brain Storming, Role Play, In- Basket exercises, Group Discussion; Teaching aids and techniques, Audio-visual aids, Cross cultural training. Concept & Importance of MDP's, Steps in MDP's, Methods and Techniques of MDP's.

Unit IV- Evaluation of Training - Feedback from participants, Measurement of training effectiveness, Types of evaluation techniques, Evaluation of trainers and facilities for training.

Unit V-Introduction to HRD - Field of HRD: A multi dimensional and new concept, Goals and challenges, Objectives and determinants, Approaches to HRD. **Issues in HRD** - Strategy for HRD: Diversify in work force, exit strategy, competitive advantage and relationship management; Human Resource Planning for diversification, expansion, mergers, acquisitions and takeovers.

Unit VI- HRD In Different Sectors: - HRD Organizations, Government Agencies and their role in HRD, Rural development through HRD, Emerging Sectors: I.T. and I.T.E.S.

Suggested Readings:

1. Personnel Management and Human Resources – N.C. Jain & Saakshi (Allied Publisher)
2. Effective Human Resource Training and Development Strategy – Dr. B. Rathan Reddy Publication –Himalaya Publication House
3. Human Resource and Personnel Management – Text and cases, K. Aswathappa, Publication - McGraw- Hill Publishing co. ltd
4. Human Resource Management , Tenth Edition, Gary Dessler, Publication- Pearson Education
5. Human Resource Management , Ninth Edition, R.Wayne Mondy, Robert M, Noe, Publication- Pearson Education
6. Human Resource and Personnel Management, by K Aswathappa, Publisher: Mc-Graw Hill.
7. Strategic Human Resource Management, by Tanuja Agrawal, Publisher: Oxford University Press.
8. Personnel and Human Resource Management: Text and Cases, By P. Subba Rao, Publisher: Himalaya Publishing House.
9. Knowledge Management and the Role of HR by Chris Harman, Publisher: FT Prentice Hall
10. HR Interventions in the Global Competitive Regime: Strategies for Leadership by Charles Xavier, C.S. Adhikary and Ramana Murty, Publisher: Excel Books

Group C: SP03: Industrial Relations & Labour Regulations

Unit I: Industrial Relation& Democracy - Definition and concept of industrial relation, basic facts, scope, aspects & ideologies of Industrial relations, Approaches to Industrial relations.

(A) COLLECTIVE BARGAINING, definition, importance, types ,prerequisites of effective collective Bargaining & Collective Bargaining in India; (B) WORKERS PARTICIPATION: Concept & meaning, Aims & objective, Forms & levels of participation, conditions essential of working of the scheme.

Unit II: Grievances & Disputes - Nature & causes, settlement machinery, social obligations, Industrial Disputes, causes, remedial & prevention measures. Consequences of Industrial disputes on Industry & Society, Significance of Peace & Harmony to Industrial Productivity & progress.

Unit III: Labour Welfare & Social Security Concept - Meaning & scope, Labour welfare & welfare officer in Indian Industry, his role, perceptive, limitations, role perception and role performance, New challenges & expectations, Training of welfare officers; Aims of social security measures, methods of providing social security, benefits to workers-social assistance and social insurance, origin and growth of the idea of social security.

Unit IV: Labour Legislations & ILO - Nature, Scope, character growth & development of labour legislation In India, Legislation & the constitution of India; Constitution, working & impact of ILO on Labour Legislations in India, ILO convention & recommendations

Unit V- Normative Labour Legislations - Factories Act, 1948, Bombay shop & Establishment Act 1948, PULP Act 1971.**Wage Legislation** - Minimum wages Act, Payment Of wages Act 1936, Payment of Bonus Act 1965.**Industrial Relations Legislations** - Trade Union Act 1926, Industrial Employment standing order Act 1946, Bombay Industrial Relations Act, Industrial Dispute Act 1947.**Social Security Legislations** - Workmen's compensation Act, Employees state Insurance Act 1948, Provident Fund Act 1952 and Payment of Gratuity Act 1972.

Unit VI: Functions & Working Of Offices Attached To Labour Ministry - Directorate –General of Employment & Training; Labour Bureau; Welfare Commissioners; Various committee constitute by the Government of India (Ministry Of Labour).

Suggested Readings:

1. Dynamics of Industrial Relations by Mamoria & Mamoria – Publisher: Himalaya Publishing House.
2. Industrial Jurisprudence & Labour Legislation by A.M. Sarma, 9 th revised edition – Publisher: Himalaya Publishing House
3. Labour Laws --- Taxman's
4. Essentials of Human Resource Management & Industrial Relations by P. Subbha Rao – Publisher: Himalaya Publishing House.
5. Industrial Relations by C. S. Venkata Ratnam – Publisher: Oxford University Press.

Group C: SP04: Global HRM Scenario & Practices

Unit I: Introduction - Business Management of Global Companies - Characteristics of global companies, Difference between domestic and global companies, H.R. strategy planning for global organizations, HRM approaches in global companies objectives and scope of international HRM, cultural and reality shock.

Unit II: Comparative Employment Policy - Concept, significance, convergence theory, Marxist theory, the cultural approach power Distance (PDI), Uncertainty avoidance (UAI), Individuality (INV), Masculinity (MASC).

Unit III: Social Environment ,Staffing and Compensation - Concept, Social environment and HR practices, Staffing: International recruitment, selection, training and hiring policies, Staff retaining and motivating techniques, **International Compensation** - Principles of International Compensation, Methods and practices of International Compensation, International Compensation and employee satisfaction, case study.

Unit IV: Cultural Literacy and HR Information System in Global Business - Cultural awareness: essentials, advantages, cultural skills for co-operative advantages, HR information system: Concept, limitations and Uses, Designing of HRIS, Computerized skill inventories.

Unit V: Developing Global Managers - Global literate leader: concept, essential qualities, communication and interpersonal Relations, Training, Career development, succession planning, managerial stimulation's; case study.

Unit VI: HRM in Europe Japan And America - Background of Europe, the institutions of the European Community (E.C.): the council of ministers, the commission, the court of justice, the parliament, the social charter, E.C. legislation procedure, case study; Japans Employee management: Introduction, lifetime employment, characteristics, importance, limitations, the seniority wage system, relevance of Japanese Management in Indian Context, case study.

Suggested Readings:

1. Strategic Human Resource Management by RANDALL S. SCHULER and SUSAN E JACKSON
Publisher:Blackwell Publishing,
2. Human Resource Champions by Dave Ulrich, Publisher: Harvard Business School Press.
3. International Human Resource Management by Randall Schuler & Dennis Briscoe, (Routledge
Global Human Resource Management Series
4. International Human Resource Management by Monir Tayeb, Publisher: Oxford University Press.
5. Corporate HRD by Biswajeet Pattanayak, Publisher: Excel Books

Group C: SP05: Human Resource Development Strategies and Systems

Unit I: Comparative Study of Various HR Disciplines: Comparative study of Human Resource Development, Human Resource Management, Human Capital Management and Personnel Management, case studies.

Unit II: H.R.D. Culture and Strategies - HRD culture and practices, Subculture, subsystem, problem, Strategies for adapting changes in external environment, propagation of culture through HRD, Case studies.

Unit III: HR Information System (HRIS) - Objectives, Concept, significance, limitations, steps in HRIS, Process and application in HRIS, Study of HRIS models.

Unit IV: HR System Design - HR System Design: Principles and Practices, Machinery and Sub systems of HR system Design, HRD intervention.

Unit V: HRD in India & Skill Enhancement Techniques - Recent Scenario and Changes, HRD Barriers in India, Case study. Total Quality Management (TQM), Knowledge Management, H.R. Restructuring, Reengineering, Quality Circles.

Unit VI : H.R. Accounting, Research And Audit - HR accounting and Audit: Need, significance and techniques, HR Valuation, H.R. Research process: Importance and difficulties in HR research.

Suggested Readings:

1. Human Resource and Personnel Management, by K Aswathappa, Publisher: Mc-Graw Hill.
2. Strategic Human Resource Management, by Tanuja Agrawal, Publisher: Oxford University Press.
3. Personnel and Human Resource Management: Text and Cases, By P. Subba Rao, Publisher: Himalaya Publishing House.
4. Knowledge Management and the Role of HR by Chris Harman, Publisher: FT Prentice Hall
5. HR Interventions in the Global Competitive Regime: Strategies for Leadership by Charles Xavier, C.S. Adhikary and Ramana Murty, Publisher: Excel Books

Group D - Information Technology Management

Group D: SP01: Database Management Systems

Unit I: Introduction to Database Management System - DBMS (Database Management System), FMS(File Management System), FMS Versus DBMS, Over view of DBMS, DBMS Model, DBMS Architecture. Design Consideration, Decomposition, Functional Dependency, Normalization, 1NF(First Normal Form), 2NF(Second Normal Form),3NF(Third Normal Form),BCNF(Boyce-Codd Normal Form) (First Normal Form),4NF(Fourth Normal Form),5NF(Fifth Normal Form), De-normalization.

Unit II: Entity / Relationship (ER) Modeling - Aspects of ER modeling, Types of Relationship, Practical Applications, Developing of ER Diagrams of various systems (e.g. Organizations, Educational Institutions and any live entity examples). Relational Model - Relational Database Primer, Relational Database Characteristics, Relational Algebra, Relational Calculus, Database Integrity, Keys, Entity & Referential Integrity, Views, Joins.

Unit III: Brief Introduction to SQL - History & standardization of SQL, Benefits of SQL, Elements of SQL languages, Database Objects, Reserve words, Variables, data types, DDL commands(CREATE, DROP, MODIFY, ALTER), DML COMMANDS (INSERT, UPDATE,DELETE, SELECT), DCL commands, Embedded SQL, Dynamic SQL.

Unit IV: Data Mining & Data Warehousing - Data Mining- Concept, Terminology, Functions, Applications, Types (Text, Concept, Graph, Sequence, Tree), Techniques, Software. Data Warehousing - Concept, History, Storage Methods, Success Parameters, Software Evaluation, Architecture, Developing Strategy, Use in Strategic Decision Making, Maintenance Issues, Web Data Analysis.

Unit V: Object Technology - Introduction to Object Technology, Abstraction, Encapsulation, Inheritance, Object Technology & RDBMS, Object Oriented Database Management System (OODBMS).

Unit VI: Advanced Topics in DBMS - Deductive Databases: features, Overview of Logic, knowledge representation, Internet & DBMS, Multimedia Database, Digital Libraries and Mobile Databases. Database Security - Threats & Risk, Cryptography, Digital Signature, Database Control, User & Database Privileges.

Suggested Readings:

1. Database Processing; Fundamentals, Design, and Implementation: David Kroenke, McMillan
2. Systems and Developers Manual for a RDBMS such as ORACLE
3. Guide to SQL: Philips Pratt, Boston Boyd and Fraser, 1990
4. Object Oriented Analysis: Peter Coad and Yourdon Edward, 2nd Ed, Eaglewood Cliff, New Jersey Yourdon Press
5. Database Management: Fred McFadden and Jeffery Hoofer, 3rd Ed., Redwood City, Benjamin – Cummins, 1991
6. Data Mining Techniques: For Marketing, Sales, and Customer Relationship Management by Michael J. A. Berry

Group D: SP02: E-Business

UNIT- I: Introduction-Definition of E-commerce, Unique Features of E-commerce Technology: Ubiquity, Global Reach, Universal Standards, Richness, Interactivity, Information Density, Personalization/ Customization, Social Technology: User Content Generation and Social Networking, Web 2.0, Play My version; Growth of the Internet and the Web, Origins and Growth of E-commerce, Insight on Technology: Spider Webs, Bow Ties, Scale-Free Networks and Deep Web Technology and E-commerce in Perspective

Unit – II: E-Business Technologies-The Internet: Key Technology Concepts: Packet Switching, Transmission Control Protocol/Internet Protocol (TCP/IP), IP Addresses, Domain Names, DNS, and URLs, Client/Server Computing The Internet Today: The Internet Backbone, Internet Exchange Points, Campus Area Networks (CANs), Internet Service Providers, Intranets and Extranets, Who Govern the Internet? Building an E-commerce Website: Planning: The Systems Development Life Cycle, Systems Analysis/Planning: Identify Business Objectives, System Functionality and Information Requirements. , System Design: Hardware and Software Platforms, Building Your-Own versus Outsourcing, Host your Own versus Outsourcing

UNIT – III: E-Business Models- Eight Key Elements of a Business Model: Value Proposition, Revenue Model, Market Opportunity, Competitive Environment, Competitive Advantage, Market Strategy, Major Business to-Consumer (B2C) Business Models: Portal, E-tailer, Insight on Technology: Search, ads and Apps: The future for Google, (and Microsoft), Content Provider, Transaction Broker, Market Creator, Service Provider, Community Provider, Major Business-to-business (B2B) Business Model: E-distributor, E-Procurement, Exchanges, Insight on Business: Onvia Evolves, Industry Consortia, Private Industrial Networks, Business Models in Emerging E-commerce Areas: Consumer-to-consumer (C2C) Business Models, Peer-to-peer (P2P) Business Models, M-commerce Business Models , E-Commerce Enablers: The Gold Rush Models, Insight on Society: Is Privacy Possible in a Wireless World?, How the Internet and the Web Change Business: Strategy, Structure, and Process, Industry structure , Industry Value Chains, Firm Value Chains, Firm Value Webs, Business Strategy.

UNIT- IV: Back Office Automatics For E-Business - Basics of Enterprise Resource Planning, ERP Decision, Enterprise Architecture Planning, ERP Implementation, ERP Architecture and Toolkit Evolution, Implementation Supply Chain Management And E- Fulfillment: The Basics of Supply Chain Management, Internet-Enabled SCM, E-Supply Chain Fusion, Management Issues in e-supply Chain Fusion, The continuing Evolution of e-Supply Chains, A Roadmap for Managers, Demystifying E-Procurement: Buy-Side, Sell-Side, Net Markets And Trading Exchanges: Evolution of e-Procurement Models, Evolution of Procurement Processes, e- Procurement Infrastructure Integrating Ordering, Fulfillment, and payment, E-Procurement, Analysis and Administration Applications, Marketplace Enables, A Roadmap for e-Procurement Managers.

UNIT-V: Moving To E-Business - Spotting E-Business Trends, Trends Driving E-Business, Customer-Oriented Trends, E- Service Trends, Organizational Trends, Employee Megatrends, Enterprise Technology, Trends, General Technology Trends, What These 20 Trends Have In Common, Digitizing The Business: E-Business Patterns, E-Business Patterns: The Structural Foundation, The E-Channel Pattern, The Click-And-Brick Pattern, The E-Portal Pattern, The E- Market Maker Pattern, The Pure-E “Digital Products” Pattern, Thinking E-Business Design: More Than Technology, The Race To Create Novel E-Business Designs, Step: 1: Self – Diagnosis, Step: 2: Reverse The Value Chain, Step: 3: Choose A Focus, Step 4: Execute Flawlessly, Lessons From E-Business Design.

UNIT – VI: Ethical, Social And Political Issues -Understanding Ethical, Social, and Political Issues in E-commerce, A Model for organizing the issues, Basic Ethical Concepts: Responsibility, Accountability, and Liability, Analyzing Ethical Dilemmas, Candidate Ethical Principles, Privacy and Information Rights, Information Collected at Ecommerce Sites, Profiling and Behavioral Targeting, The Internet and Government Invasions of Privacy:, E-commerce Surveillance, Legal Protections, Informed Consent, Intellectual Property Rights, Types of Intellectual Property Protection, Copyright: The Problem of Perfect Copies and Encryption, Patents: Business Methods and Processes, Trademarks: Online Infringement and Dilution, Challenge: Balancing the Protection of Property with other values.

Suggested Readings:

1. Michael Allen's E-Learning Library: Creating Successful E-Learning: A Rapid System For Getting It Right First Time, Every Time (Michael Allen's E-Library) by Michael W. Allen
2. Harvard Business Review on Corporate Governance (Harvard Business Review Paperback Series) by Walter J. Salmon, Jay William Lorsch, Gordon Donaldson, and John Pound
3. E-Commerce: Business, Technology, Society (3rd Edition) by Kenneth Laudon and Carol Traver
4. Knowledge Management by Carl Frappaolo

Group D: SP03: Software Engineering & Management

Unit – I: Introduction: The Software Engineering Discipline – Evolution And Impact; Programs Vs. Software Products; Why Should Software Engineering; Emergence Of Software Engineering: Early Computer Programming, High-level Language Programming, Control Flow-based Design, Data Structure-oriented Design, Data Flow-oriented Design, Object-oriented Design; Software Life Cycle Models; Classical Waterfall Model; Iterative Waterfall Model; Prototyping Model; Evolutionary Model; Spiral Model

Unit – II: Software Project Management; Responsibilities Of A Software Project Manager; Project Planning; Materials For Project Size Estimation: Lines Of Code (LOC), Function Point Metric; Project Estimation Techniques: Empirical Estimation Techniques, Heuristic Techniques, Analytical Estimation Techniques; Empirical Estimation Techniques: Expert Judgment Technique, Delphi Cost Estimation; Cocomo – A Heirostoc Estimation Technique: Basic Cocomo Model, Staffing Level Estimation: Norden’s Work, Putnam’s Work Risk Management: Risk Identification, Risk Assessment, Risk Containment

Unit – III: Classical Analysis And Design Of Software Requirements Gathering And Analysis; Software Requirements Specification (SRS): Contents Of The Srs Document, Functional Requirements, Traceability , Characteristics Of A Good Srs Document; Software Design; Cohesion And Coupling, Classification Of Cohesiveness, Classification Of Coupling; Software Design Approaches: Function-oriented Design, Object-oriented Design; Function-oriented Software Design; Overview Of SA/SD Methodology; Structured Analysis; Data Flow Diagrams (DFDs): Primitive Symbols Used For Constructing DFDs, Some Important Concepts Associated With Designing DFDs; Structured Design: Flow Chart Vs. Structure Chart, Transformation Of A DFD Model Into A Structure Chart;

Unit – IV: Object Oriented Software Analysis And Design - Object Modelling Using UML; Unified Modelling Language (UML): UML Diagrams Use Case Model: Representation Of Use Cases, Use Case Packaging; Class Diagrams; Interaction Diagrams; Activity Diagrams; State Chart Diagram Object-oriented Software Development; Design Patterns

Unit – V: Software Quality - Software Reliability And Quality Management: Software Reliability: Reliability Metrics, Statistical Testing; Software Quality; Software Quality Management System: Evolution Of Quality System; SEI Capability Maturity Model: Comparison Between ISO 9000 Certification And SEI /CMM; Six Sigma

Unit – VI: Software Testing - Coding: Coding Standards And Guidelines; Code Review: Code Walk-throughs, Code Inspection; Testing: Verification Vs. Validation, Design Of Test Cases; Unit Testing; Blackbox Testing; White-box Testing; Debugging; Integration Testing; System Testing: Performance Testing; Software testing fundamentals-Testing-related terminology like Errors, Bugs, Defect, Objectives of the testing, Test techniques, Testing types, Defect Analysis and Defect reports, Overview of Testing Tool ‘Winrunner’.

Suggested Readings:

1. Software Engineering - A Practitioner’s Approach by Roget Pressman
2. System Analysis and Design by Elias Awad
3. Software Engineering (7th Edition) (International Computer Science Series) by Ian Sommerville
4. The Engineering of Software: A Technical Guide for the Individual by Dick Hamlet and Joe Maybee
5. Schaum’s Outline of Software Engineering by David Gustafson

Group D: SP04: Enterprise Resource Planning

Unit I: Introduction to ERP - Concepts: Enterprise System, Resource Planning, Enterprise Potential, Total Enterprise Solution, ERP-II. History & Evolution of ERP, Benefits of ERP, Critical Success Factors for ERP. Estimation Procedures - System Evaluation, RFI, FRS, RFP, Evaluation Components, Build / Buy Decisions.

Unit II: ERP Life Cycle - ERP Project, Stages of Project Life Cycle, System Requirements for ERP Implementation, Pre-Implementation, Implementation And Post-Implementation, ERP Product Life Cycle, Risks in ERP / SAP Implementation. ERP Architecture - Client Server, Distributed, Web Enabled.

Unit III: Product Selection - ERP Market, Market share of various Companies: Oracle E-Business Suite, SAP R/3, PeopleSoft, BaaN, JD Edwards One World and IFS, Vendor Comparison, Market Analysis, ERP Packages for SME. Project Management - Scope, Skill-sets, Teams, Leaders, Consultants, Vendors etc, Change Management in ERP, Need / Value / Strategy / Layers / Standards of System Integration.

Unit IV: ERP Modules I - Finance (FICO), Sales and Distribution (S&D)-Features, Benefits and Overall Functionality

Unit V: ERP Modules II - HRM, CRM and ABAP- Features, Benefits and Overall Functionality

Unit VI: ERP Market - Reasons for high demand of ERP, Emerging Standards, Managing Change in ERP; Role of ERP in Industries like: Automotive, Process, Capital Goods, Project Engineering and Pharmaceuticals, Best Business Practices. ERP Cases - TISCO, Mahindra & Mahindra, HLL, L & T, Escorts, Electrolux, BPCL.

Suggested Readings:

1. Textbook of Enterprise Resource Planning: Jaiswal / Vanapalli, McMillan
2. Concepts in Enterprise Resource Planning by Joseph Brady, Ellen Monk, and Bret Wagner
3. From Underdogs to Tigers: The Rise and Growth of the Software Industry in Brazil, China, India, Ireland, and Israel by Ashish Arora and Alfonso Gambardella
4. Countdown 2000, Leon Alexix, TATA McGraw Hill

Group D: SP05: Innovations in IT

Unit I: IT Enabled Services (ITeS): Outsourcing - India as Ideal Destination, India Outsourcing History, Outsourcing Writing to India, Call Centers in India, Multilingual Call Centers, Voice/Non-Voice ITeS (BPO Services), HIPAA Compliance in India, Outsourcing Engineering Services, Radiology and Intellectual Property to India. BPO: BPO Concept, Offshoring, Nearshoring, Homeshoring, Medical / Legal Transcription, Back-Office Accounting, Insurance Claims, Credit Card Processing, BPO in India, BPO Security, BPO in India - Legal Issues.

Unit II: Networking Technology and Systems (NeTS) - Next Generation Multi-service Networks, Future INternet Design (FIND), IP Telephony (IPT): IPT Components, Soft Phones, Wireless IP Phones, Voice Gateways, Inter-cluster Call, Telco Signaling Protocols, VoIP, VoIP Protocols, Large-Scale IPT and Voice-Mail Network: Voice Network Architecture, Overview: Network Planning and Designing.

Unit III: Communication Technologies-I & II - Next Generation Mobile Networks, Heterogeneous Networks, Ad-Hoc & Sensor Networks, Wireless Networks: WiFi, WiMax, Cellular, 3G/4G. Mobility Management and Mobile Computing, Technology Convergence: GSM/CDMA/TDMA, Quality of Service Issues, Network Security and Privacy, Grid Computing and Clustering, Mobile TV, MMIT.

Unit IV: Web Applications and Services-I & II- Internet Services and Applications, Web Services, Internet Computing, E-Learning , Middleware , Web Information Systems. Web Based Software, Semantic Web, Agent-Oriented Computing, E-Business, E-Commerce & E-Government, Ontology Engineering, Portal Technologies.

Unit V: Computing and Information Systems - Advanced Computer Architectures, Virtual Reality, Databases & Data Mining, Agile Information Systems, AI & DSS, High Performance & Cluster Computing, Real-Time and Embedded Systems, Information Systems Integration , Geographical Information Systems, Business Process Modeling.

Unit VI: IT Trends - Biometrics, Fuzzy Logic & Neural Networks, Organic Growth, Audio/Visuals: mp3, mpeg and IPOD, General Outline of IT Act'2000, Case Studies: Mobile Industry Market Players: Nokia, Motorola, Sony-Ericson, Samsung and LG. GIS: Google Earth, E-Learning: Zee TV, E-Governance: Andhra Pradesh, Gadgets: Apple Store, Networking: Cisco.

Suggested Readings:

1. Offshore Ready: Strategies to Plan & Profit from Offshore IT-enabled Services by Stuart Morstead
2. Networking Infrastructure for Pervasive Computing: Enabling Technologies and Systems by Debashis Saha, Amitava Mukherjee, and Somprakash Bandyopadhyay
3. Introduction to Mobile Communications: Technology, Services, Markets (Informa Telecoms & Media) by Tony Wakefield, Dave McNally, David Bowler, and Alan Mayne
4. iPod & iTunes: The Missing Manual, Fourth Edition by Jude Biersdorfer
5. Developing Web Services for Web Applications: A Guided Tour for Rational Application Developer and WebSphere Application Server (IBM Illustrated Guide Series) by Colette Burrus and Stephanie Parkin

GROUP E: HEALTHCARE MANAGEMENT

Group E: SP01: Healthcare and Social Policy

Unit I: Social Welfare, Social policy, **Factors in Social Policy:** Situational, Structural, Ideological and Environmental, **Health Policy formulation:** Factors, Determinants and other sectoral issues.

Unit II: Health care and Social development.

Unit III: National health policy: Review of different committees. **Health policy:** Input, Output and Performance; Role of Private and Voluntary groups; Role of national and International agencies. **Health and Social Policy:** International Perspective; Health policy the Disadvantaged.

Unit IV: Concept of Health Care Planning, Health Expenditures, Hospitals as a Health Care Delivery System. Management of Health Care Systems. Dimensions of Health Care Management.

Unit V: Concepts of Environmental Health Care; Microbiological considerations; Laundries, CSSD, Insect, Rodent Control, Emergency and Disaster Planning; Safety Management; Patients and Personnel Safety, Fire Safety, General Sanitation.

Unit VI: Hazardous Waste Management; Solid Waste Handling & Disposal; Liquid Waste Handling, Collection & Disposal; Water Treatment and Distribution, Planning and Organising for Safety and Waste management. Legal and Social Aspects of Waste Management; Trends and Practices.

Suggested Readings

1. Chatterice, Meera, "Implementing Health Policy". 1988, Manohar, New Delhi,
2. Djunkanovic, V and Mach, E P. ed "Alternative Approaches to Meeting Basic Health Needs in Developing Countries", 1975. WHO, Geneva.
3. Lee, Kenneth and Mills, Anne. "Policy making and Planning in Health Sector". 1987, Oxford University Press, Oxford.
4. Leichter, HM. "A comparative approach to Policy Analysis: Health Care Policies in Four Nations", 1979. Cambridge University Press, Cambridge.
5. Roemer, M I. "Comparative National Policies on Health Care". 1977. Mareel Dekker, New York.
6. Ferry, Ted Safety & Health Management Planning, Van Nostrand Reinhold, New York. 1990.
7. Journal of Hazardous Waste Management. U.S.A.
8. Zweife, Peter I and Friedrich Breyer Health Economics, Oxford University Press, New York, 1997.
9. Kurt. Darr & Jonathan S R, Hospital Organization and Management Text and Brading, CBS Publishers & Distributors, 1992
10. Goyal, R.C Handbook of Hospital Personnel Management, Prentice Hall of India, New Delhi, 1993

Group E: SP02: Community Health, Epidemiology & Population Management

Unit I: Meaning and scope of epidemiology.

Unit II: Health statistics and health indicator, Morbidity, Mortality. Data sources, collection, analysis and uses, Health Information System, Use of Computers.

Unit III: Primary health care and community participation. Models and factors associated with health and diseases.

Unit IV: Organizational aspects of community health. Clinical care.

Unit V: Physical aspects of community health, Psychological aspects of community health. Special aspects of community health, Drugs, Alcoholism etc. Preventive and promotive health care.

Unit VI: Population policy, Planning and management.

Suggested Readings

1. Alderson, M. "An Introduction to Epidemiology". 2nd,ed. 1983. MacMillan, London.
2. Hill, A B. "A short textbooks of Medical Statistics". 1~84. UNI Books
3. Jolly, K G. "Family Planning in India 1969-84: A District Level Study", 1986. Hindustan, Delhi.
4. Abelln, T Brzenski, Z J and Carstals, V D. "Measurement in Health Promotion and Protection", 1987, WHO, Copenhagen.
5. Pollard, A H. etc "Demographic Techniques", 1981. Pergamon, Oxford.

Group E: SP03: Health Systems Management

Unit I: Systems analysis and systems dynamics in health care. Health systems: Characteristics, Planning methodologies, Goals and functions.

Unit II: Quantitative foundations of health services management.

Unit III: Health Systems research: Uses and applications; Evaluation methodologies for monitoring the performance and needs in health services, Operational planning and management Issues in health care. Health care decision making for mega problems: Approaches.

Unit IV: Contemporary trends in health care; Health Manpower policy.

Unit V: Planning and management. Management of Costs; Health care Budgeting; Cost Containment.

Unit VI: Project Management in Health care.

Suggested Readings

1. Ferrer, H P. ed. "The Health Services Administration Research and Management", 1972. Butterworths, London
2. Hodgetts, R M and Cascio, D M. "Modern Health Care Administration", 1983. Academic Press, New York
3. Hornby, P. etc. "Guidelines for Health Manpower Planning", 1981. WHO, Geneva
4. "National Conference on Evaluation of Primary Health Care Programmes", '1980. ICMR, New Deihl.
5. Wortman P M. ad "Methods for Evaluating Health Services". 1981. Sage, London.

Group E: SP04: Health and Hospital Information Systems

Unit I: Concept of Health; Health Care and Hospitals, Indian Health Care System.

Unit II: Government- Health Care Interface; Hospital as a Subsystem of Health Care System. Hospital Functions; Hospital Organization, Classification of Hospitals; Components of a Hospital System; Changing Role of Hospital Administration; Need for Managerial Functional Specialists.

Unit III: Decision making in Hospitals, Understanding Decision making Process; Drawbacks of Hospital Communication System; Need for Systems approach to Hospital; Concepts of Computers and Communication Technology. Database Concepts, Networks and Communication; Types of Networks, Network Topologies, Information Technology in Hospitals; Information System Concepts, Types of Information Systems. Hospital Information System; Systems Analysis and Design of Hospital Information Systems; Design Considerations; Development Approaches.

Unit IV: Issues and Challenges of Hospital Management. Implementation Strategies; Functionality of Computerized Hospital Information Systems.

Unit V: Merits and Demerits of CHIS, Trends in HIS.

Unit VI: HIS as a Control System; Resource Utilization & Control in Hospitals.

Suggested Readings

1. Lele, R D Computers in Medicine, Tata McGraw Hill Publishing Co. Ltd, New Delhi. 1988.
2. Panko, Raymond R Business Data Communications., Prentice Hall Inc. London. 1997.
3. Hospital Information Systems - The Next Generation, Velde, Rudi Van de Springer Verlag, 1992
4. Health Information In India, Central Bureau of Health Intelligence, Ministry of Health & Family Welfare, Govt. Of India, New Deihl. .
5. Awad, Elias M..Systems Analysis & Design, Prentice Hall of India, New Delhi. 1990

Group E: SP05: Health Communication: Development and Dissemination

Unit I: An overview of many substantive areas of study within health communication like interpersonal communication, inter-cultural communication, mass media health images, communication campaigns, alternative medicine, health ethics.

Unit II: Use of least three artifacts (such as pamphlets, print ads, video, etc.) analyses the rhetoric of a successful or an unsuccessful health communication campaign such as AIDS awareness, smoking cessation.

Unit III: Plan, deliver & evaluate health information & disease prevention campaigns, advocate for health policy initiatives & manages health care delivery systems

Unit IV: Healthy campaign or develop a television programme/Health literacy & strategies dissemination in areas of public health emerging from research in hearing, balance, smell, taste, voice, speech or language and materials that make complex disease issues more understandable to public e.g. materials to accompany genetic counseling in areas of inherited disorders.

Unit V: Organising for better Health Care Management; Collective Employee Participation; Bargaining; Rewards and Punishments.

Unit VI: Role of mass media in Parenting education , Dimension of health Care Communication

Suggested Readings

1. Payers, Lynn. *Medicine & Culture* - New York: Henry Holt & Company 1996.
2. Du Pre, Athena, *Communicating about Health: Current issues & Perspective*. Mountain view LA: May field publishing Company, 2000.
3. *Health Communication*. New Jersey School of Public Health, 1998.
4. *Role of Mass Media in Parenting Education*, 1997. Harvard School of Public Health Centre for Health Communication.
5. *Text book of Preventive & Social Medicine*, 2000.

Group F - International Business Management

Group F: SP01: External Sector In India – Policy, Procedures & Practices

Unit I: Composition, Growth And Direction Of Exports & Imports From India (Countries & Commodities/ Products) Major Export & Import Products & Services, Iec Codes Importance And Procedures, Export Incentives, Thrust Areas For Export Promotion.

Unit II: Role Of Government/ Institutions In Export Promotion – Commerce Ministry, Dgft, Chambers Of Commerce, Export Promotion Councils, State Trading Corporations, Commodity Boards, Eou Etc.

Unit III: Export Quality & Packaging Standards , Customs And Excise Regulations Applicable To Exports & Imports, Role Of Clearing & Forwarding Agents.

Unit IV: Exim Documentation, Preparation Of Contracts, Processing Export Order, Introduction To Letters Of Credit, Incoterms & Ucp 600, Ispm-15 (Fumigation)

Unit V: Logistics Management , Shipping Cargo, Vessels And Charters, Multi Modal Transport, Shipping Documents.

Unit VI: Marine / Air Insurance, Export Risk Coverage (Ecgc) Settlement Of International Trade Disputes, Arbitration,

Suggested Readings:

International Business Environment– V.K. Bhalla, Anmol Publications

Export Management – Khurana, Galgotia Publications

Export Import Procedures & Documentation – K.S. Jain, Himalaya Publishing

Group F: SP02: Foreign Exchange Management & Export Finance

Unit I: Foreign Exchange Framework – Exchange Rate Systems, Foreign Exchange Markets(Nature, Functions & Participants) , Determination Of Exchange Rates.

Unit II: Foreign Exchange Arithmetic – Types Of Exchange Rates, (Spot / Forward Etc.) Direct Quotation, Calculation Of Rate Of Exchange, Cross Rates & Chain Rule.

Unit III: Overview Of Fema – General Provisions Applicable For Export / Import Transactions

Unit IV: Finance Of Foreign Trade – Need, Importance Of Export Finance, Funded And Non Funded Facilities, Pre-shipment, Post Shipment Credit Principles And Procedures, Preshipment Credit In Foreign Currency (Pfc), Factoring And Forfaiting, Role Of Financing Bank In Export Finance, Concept Of Central Bank & Its Control On International Trade In Country.

Unit V: Risk Management In Foreign Exchange – Foreign Exchange Risk Nature And Implications, Transaction , Translation And Economic Exposure, Hedging, Forward, Future, Swaps And Options

Unit VI: Foreign Exchange Inflows (Major Sources) - Nri Accounts Types, Eefc Accounts, Fdi And Fii , Ecb, Adrs And Gdrs, Nastro & Vastro Accounts.

Suggested Readings:

Foreign Exchange – Jeevanandam C. Sultan Chand & Sons

International Financial Management – V.K. Bhalla, Anmol Publications

Foreign Trade & Foreign Exchange – Chaudhari & Agrawal, Himalaya Publishing House

Group F: SP03: International Marketing.

Unit I: Globalisation And International Business – Concepts And Features Of Globalisation And International Business, Transformation Of International Business Due To Globalisation

Unit II: International Marketing – Basic Concepts, Difference Between International Trade And International Marketing, Relevance Of Marketing Mix (7p's) In International Marketing

Unit III: International Marketing Environment –Study Of Environmental Factors, Analysis And Identification Of Target Markets.

Unit IV: Product Design And Development For Global Markets, Adaptation And Product Positioning, Technology Issues, Competitiveness Of Products

Unit V: Marketing Strategies Of Multinational Corporations , Global Outlook, Local Orientation, Promotional And Pricing Strategies, For International Markets.

Unit VI: Entry And Operating Decision In International Markets, Agency Arrangements, International Distribution, Setting Marketing Setup Abroad, Collaborations, Joint Ventures, Mergers, Acquisitions For Global Expansion, Home & Host Country Approach,

Suggested Readings:

International Marketing – Rathor & Jani, Himalaya Publishing

International Marketing – Rajagopal, Vikas Publishing House

International Marketing – Varshney & Bhattacharya, Sultan Chand & Sons

Group F: SP04: International Finance & Human Resource Management

Unit I: International Financial Markets, And Instruments - Indian Legal System Governing The International Financial Markets & Supporting The International Trade, Special Reference Eu, Origin And Development Of Euro Currency Markets, Importance And Features Of Euro Markets , Equity And Debt Instruments In Euro Markets

Unit II: Long Term And Short Term Fund Sources In International Financial Markets - Features Of Euro Bonds, Syndicated Credit, Equity,, Euro Notes, Euro Commercial Paper.,

Unit III: International Finance - Contemporary Issues And Challenges Currency Risks, Currency Fluctuations, Domestic Interest Rates Affecting International Trade Libor/Mibor. Transfer Pricing, Derivatives, International Accounting And Taxation, Transfer Pricing, Tax Treaties, Oecd.

Unit IV: International Human Resource Management, Concept, Need And Importance In Global Operations.

Unit V: International Human Resource Management – Strategy And Practices - Organisational Structure Decision, Orientation Of Policies And Procedures, Cross Cultural Issues .

Unit VI: International Human Resource Management Functions - Recruitment, Selection, Training ,Placement And Compensation Of Expatriates And Local Staff Of Foreign Branches.

Suggested Readings:

International Business – Subba Rao, Himalaya Publications
International Business – R.M. Joshi, Oxford University Press
International Financial Management – V. Sharan Prentice Hall India
Textbook Of International Hrm – S.C. Gupta , Macmillan Publishers India

Group F: SP05: India's Foreign Trade Policy & International Economic Organisations

Unit I: India's Foreign Trade in the Global Context, Structure and Equilibrium of India's Balance of Payments

Unit II: Recent Trends in India's foreign trade; Directional Pattern; Major export commodities- Thrust area commodities- their trend, problems and prospects; Major competitors; Major Import Commodity Group

Unit III: Trade Control in India; Foreign Trade (Development and Regulation) Act, Import and Export Control Orders; Import and Export Licensing System; Exchange Control in India; Blanket Permit System.

Unit IV: Import Substitution and Export Promotion Policies; Export Incentives; Financial and Fiscal; Deferred Payment System and the Role of EXIM Bank of India; Export Credit Insurance;

Unit V: International Economic Organisation and Development Diplomacy; International Organisations as international institutions; International Monetary Fund (IMF).

Unit VI: World Bank Group-International Bank For Reconstruction and Development (IBRD), International Development Agency (IDA), International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA); General Agreement on Tariffs and Trade (GATT); World Trade Organisation (WTO), United Nations Conference on Trade and Development (UNCTAD) ; International Labour Organisation (ILO).

Suggested Readings:

1. Bhalla, V.K. International Business Environment and Management. 8th ed., Delhi, Anmol, 2001.
2. Bhashyam, S. Export Promotion in India: The Institutional Infrastructure, Commonwealth Pub., Delhi, 1988
3. Khanna, Sri Ram Export Marketing in India's New Manufacturers, University of Delhi, Delhi, 1986
4. Jain, S.K. Export Performance and Export Marketing Strategies, Common wealth Pub., Delhi, 1988.
5. Nayyar, Deepak India's Export and Export Policies in the 1960s. Cambridge University Press, 1976.
6. Bhalla, V.K. International Monetary Cooperation, Delhi, Anmol, 1992.
7. Hunt, Diana Economic Theories of Development; An Analysis of Competing Paradigms, Hemel Hempstead; Harvester Wheatsheaf, 1989.
8. Keohane, Robert O. International Institutions and State Power; Essays in International Relations Theory Boulder; Westview, 1989.
9. Krasner, Stephen D. Structural Confilct; The Third World Against Global Liberalism, Berkley, University of California Press, 1985.
10. Simai, Mihaly The Future of Global Governance, Washington, D.C; United States Institute of Peace Process, 1994.

Group G: Operation Management

Group G: SP01: Supply Chain Management

Unit I: Understanding the Supply Chain, Supply Chain Performance and Drivers

What is Supply Chain, Objectives of a Supply Chain, Importance of Supply Chain Decision, Decision Phases in a Supply Chain, Competitive and Supply Chain Strategies, Achieving Strategic Fit, Drivers of Supply Chain Performance, Framework for Structuring Drivers.

Unit II: Designing the Supply Chain Network Designing Distribution Networks and Applications to e-Business: Role of distribution in a supply chain, Factors influencing distribution network design, design options for a distribution network, e-Business and the distribution network, **Network Design in the Supply Chain:** the role of network design in the supply chain, factors influencing network design decisions, framework for network design decisions, models for facility location and capacity allocation, **Network Design in an Uncertain Environment:** Impact of uncertainty on network design.

Unit III: Planning Demand and Supply in a Supply Chain Demand Forecasting in a Supply Chain: The role of forecasting in a supply chain, Characteristics of forecast, Components of forecast and forecasting methods, Basic approach to demand forecasting, managing, **Predictable Variability:** Responding to predictable variability in a supply chain, Managing supply and demand, Managing predictability and implementing solutions to predictable variability in practice.

Unit IV: Planning and Managing Inventories in a Supply Chain Managing Economies of Scale in a Supply Chain: Role of Cycle Inventory, Economies of Scale to exploit fixed cost and quantity discount, Short term discounting, Managing Multi-echelon Cycle Inventory, **Managing Uncertainty in a Supply Chain:** Role of Safety Inventory in a supply chain, Determining Appropriate Level of Safety Inventory, Managing Safety Inventory in a multi-echelon supply chain.

Unit V: Designing and Planning Transportation Networks Transportation in a Supply Chain: Role, Modes of transportation, transportation Infrastructure, Design options for a transportation network, trade-offs in transportation design, Risk management in transportation.

Unit VI: Managing Information Flow in Supply Chains The Role of IT in a Supply Chain, The Supply Chain IT framework, Customer Relationship Management, Supplier Relationship Management, Internal Supply Chain Management, Supply Chain Technologies: Bar Code, RFID, EDI, e-business suites etc.

Suggested Readings:

1. Supply Chain Management, Chopra, Meindl and Kalra, Pearson Education, 3rd edition and after
2. Designing and Managing the Supply Chain, David, Kaminsky, Edith, TMH Edition, 2nd Edition and after
3. Supply Chain Management Text & Cases, Vinod V Sople, Pearson Education
4. Supply Chain Management,Janat Shah,Pearson Education
5. Supply Chain Management ,Ballau and Srivastava,Pearson Education

Group G: SP02: Total Quality Management

Unit I: Understanding Quality and Quality Philosophies - Definition of Quality, Dimensions of Quality, Quality Planning, Quality costs, Quality Philosophy of Deming, Joseph Juran, Philip Crosby, Genich Taguchi.

Unit II: TQM Principles - What is TQM?, What Does TQM Cover?, Guiding Principles of TQM, Managerial Perspective to TQM

Unit III: Statistical Process Control (SPC) and Other Quality Improvement Techniques – Process Control Charts, Control Charts for variables and attributes, Pareto Diagrams, Scatter Diagrams, Run Charts, Cause and Effect Diagrams, Concept of six sigma.

Unit IV: TQM Tools - Benchmarking – Reasons to Benchmark, Benchmarking Process, Quality Function Deployment (QFD), QFD Process, Benefits, Taguchi's Quality Loss Function, Total Productive Maintenance (TPM) – Concept, Improvement Needs, FMEA – Stages of FMEA.

Unit V: Quality Improvement Systems - Kaizen, Lean, Poka-Yoke, 5S, 3M, Quality Circles, Value Analysis and Value Engineering.

Unit VI: Business Process Reengineering - What is BPR?, Need for BPR, BPR in USA, Europe, India.

Suggested Readings

1. Total Quality Management, Dale H. Besterfield, et al., Pearson Education Asia, 1999. (Indian reprint 2002)
2. The Management and Control of Quality, James R. Evans & William M. Lindsay, (5th Edition), South-Western (Thomson Learning), 2002 (ISBN 0-324-06680-5).
3. Total Quality Management, Feigenbaum, McGraw-Hill, 1991
4. Total Quality Management, Poornima M. Charantimath, 2nd Edition, Pearson Education
5. TQM an Integrated Approach, Shailendra Nigam, Excel Books

Group G: SP03: Production and Materials Management

Unit 1: Introduction to Materials Management - Operating environment, Supply chain concept, What is material management?, Supply chain metrics

Unit 2: Production Planning System and Master Scheduling – Manufacturing Planning and Control System, Sales and Operations Planning, MRP, ERP, Making the Production Plan, Developing a MPS, Production Planning, Master Scheduling and Sales

Unit 3: Capacity Management and Production Activity Control - Definition, Capacity Planning, Capacity Requirements Planning, Capacity Available, Capacity Required, Scheduling Orders, Making the plan, Load Leveling, Scheduling Bottlenecks, Theory of constraints

Unit 4: Order Quantity and Independent demand Ordering System – EOQ and its variations, Quantity Discount, Fixed Period and Fixed Quantity Ordering Systems, Order Point System, Safety Stocks, Determination of Service Levels, Periodic Review System, Dependent Demand Ordering System, Kanban system.

Unit 5: Purchasing - Introduction, Establishing Specifications and Functional Specification Description, Selecting Suppliers, Price Determination, Impact of Material Requirement planning on purchasing, Expansion of purchasing into supply chain management and its organizational implications

Unit 6: JIT Manufacturing and Lean Production - JIT Philosophy, JIT Environment, Manufacturing Planning and control in JIT Environment, Lean Production, Difference between Kanban, JIT and Lean?

Suggested Reading:

1. Introduction to Materials Management-J.R. Tony Arnold, Stephen Chapman, Pearson Education 6th Edition
2. Procurement-Principles and Management, Baily, 10th Edition, Pearson
3. Purchasing and Materials Management, Gopalakrishnan, McGraw-Hill
4. Purchasing and Materials Management, Anand Kumar Mishra, D K Publishers and Distributors
5. Purchasing and Materials Management, K.C. Jain, S. Chand

Group G: SP04: Project Management

Unit 1: Introduction, Structures and Frameworks of Project Management - Introduction of the project, Historical Perspective, Definition, Current Issues, Relationship between general Management and Project Management, Project Management Knowledge Base, Project Model, 4 phase of project management, 7-S of Project Management, The project environment, Complexities of project,

Unit 2: Strategy, Project Management and Project Definition - Why Strategy, Organizational Strategy and Projects, Project Management as a strategic capability, Resource Coordination, Project and organizational goals, project performance measurement, Developing the concept, Scope Management, Project Process, Work Breakdown Structure, Process Mapping, Establishing Check Points, Stakeholder Management

Unit 3: Time Planning and Critical Chain Project Management - The Process, Gantt Charts, Estimating, Activity on Arrow and Critical Path Analysis, Activity on Node Diagrams, Activity on Arrow vs Activity on Node, Scheduling, Computer Assisted Project Planning, Fast Track Projects

Unit 4: **Cost and Quality Planning** - Cost Planning, Cost Estimating, Cost Build up, Cost Budget, Quality Planning Process, Quality Conformance and quality performance planning

Unit 5: **Plan Analysis and Risk Management** - Analyzing Time Plan, Analyzing Cost Plan, Analyzing Quality Plan, Risk Management, Risk Quantification Technique

Unit 6: Project Organization: Structure and Teams - Role of team, Pure Project Organization, Matrix Management, Structure Selection, Team Work, Life Cycle of Team, Managing personalities in a team, Effective Team Work

Suggested Readings:

- Project Management, Maylor 3rd Edition,
- Project Management: Achieving Competitive Advantage & MS Project, Pinto (Publisher)
- Project Management, Meredith, Mantek, 7th Edition, Wiley India
- Project Management and Control, Narendra Singh, Himalaya Publishing House
- Project Management; Strategic Decision and Implementation, David Cleland, Mcgraw-Hill

Group G: SP05: Operations Management

Unit I: Introduction - Introduction to Operations Management and Productivity, Operations and Competitiveness, Operation Strategy, Operation decision making tools, Facilities Layout, Facility Location Models.

Unit II: Quality Management - Introduction to Quality Management, Statistical Process Control, Acceptance Sampling, Application of quality in operation management.

Unit III: Inventory Management , Planning and scheduling - Nature , concept of Independent Demand Inventory Management, Dependent Demand Inventory Management -- MRP , Just-In-Time Systems. Aggregate Planning, Resource Planning, Linear Programming.

Unit IV: Lean Production - Project Scheduling, Waiting Line Analysis for service improvement, Introduction to Lean Production.

Unit V: Modern Manufacturing Systems - Flexible Manufacturing System, Production Planning and Control. Computer Integrated Manufacturing Systems (CIMS), Advanced Production Inventory Management Systems (APIMS).

Unit VI: Human Resource - Introduction, Job Design and Work Measurement, Project Management.

Suggested Readings

1. Operations Management - by SLACK & LEWIS, Michael Lewis, Nigel Slack
2. Operations Management - by Klaus Bellmann
3. Strategy Maps - by Robert S. Kaplan, David P. Norton
4. Operations Management – Russell & Taylor
5. Production / Operations Management – S.N.Chary

GROUP H: BANKING & FINANCIAL SERVICES MANAGEMENT

Group H: SP01: Banking Operations and Services

Unit I: Overview - Definition-utility of banks – banks and economic development -types of banks with their individual functions –Role of RBI – Monetary management –business in the globalized era, Rights of a banker, Clayton's case, Banker's Obligation to honour cheques, Secrecy of customers' accounts. Customers' Accounts -Introduction for opening new accounts, opening of savings, current and fixed deposit accounts Minor's accounts, Club accounts, Partnership accounts, Joint stock company's account. Attorney's account, Joint accounts, Insolvency of the customer

Unit II: Payment and Collection of Cheques - Form of Cheque, Date, Amount, Insufficiency of funds, customer's signature, Countermanding payment of cheque, Crossing, Not Negotiable Crossing, Endorsements and Effect of Material Alterations. Liability for conversion, Protection to the collecting Banker, Duties of Collecting Banker.

Unit III: Bills of Exchange - Definition, Parties, Accommodation Bill, Calculation of Date of Maturity, Dishonour of Bills, Noting and Protesting, Drawee in Case of Need. Bank Drafts - salient features

Unit IV: Advances - Advances against various securities, Life Policy, Fixed Deposit Receipt, Goods, Shares, Advances against Guarantees, Advances to Small-scale industries, Registration of Charge under Companies Act, 1956. Accounts Receivable financing Advances for priority sectors—Hypothecation, Documentation.

Unit V: Investment Banking services: Fee based and Fund based services: Credit Cards, Debit Cards, , Venture Capital, Factoring, Forfeiting and Bill Discounting. Leasing and Hire Purchase, Housing Finance, Other investment banking a services including distribution of Insurance and Mutual fund products, PMS – Process and monitoring.

Unit VI: Merchant Banking Services - Merchant Banking: An Introduction, Issue Management, Corporate Restructuring and Mergers and Project Financing. Securitization. Credit Rating.

Suggested Readings:

1. Basics of Banking IIBF, Mumbai Taxmann Publications – paper I
2. Banking Law & Practices by H.C. Agarwal, Siwan Publications. –paper I
3. Indian Financial System & Commercial Banking by Shri B. Raviramchandran, Dr. Dwivedi et al, IIBF, Mumbai Paper I
4. An introduction to documentary Credit – RupNarayan Bose, Macmilan India Ltd. New Delhi – paper I
5. Financial Institutions, Markets & money by David S. Kidwell & others, John Willy & Sons

Group H: SP02: Bank Financial Management

Unit I: Objective of bank management - Raising financial resources of different types at most competitive rates; deployment of funds profitably in various avenues such as loans, securities, project finance, etc.; management of various risks accompanying these functions; compliance with various regulations; keeping expenses under control and optimizing the value to the shareholders.

Unit II: Bank Profitability and Productivity-Analysis of Bank profits - computation of profit -various components of casts and yields and their parameters - indicators of return to shareholders. Need for growth – inter-dependability of growth in profits and in assets - growth of profits through improvement in efficiency (operating profitability and asset utilization) and through growth in assets (equity multiplier) - limitations on growth (regulation - risk management - technology and other costs - economic cycles)

Unit III: Bank capital and Treasury Management - Need for Bank Capital, Ideal Characteristics of Bank Capital, Common Stock, Financial Flexibility, Capital Adequacy. Treasury Management - Concept and Practice .Role of Treasury and ALCO in asset-liability management Risk Management - Credit Risk Definition, Credit Risk and its underlying risks -Default risk, Exposure risk, Recovery risk, Collateral risk, Third party guarantee risk

Unit IV: Liquidity Issues - Structuring of timing of cash flows - inflow / outflow. Identification of availability of liquidity sources to match specific liquidity needs over the time horizon of short, intermediate and long-term needs, Sourcing liquidity from the money market and dependence on Liquidity Adjustment Facility of the Central Bank. Tying up back stop facilities / line of credit for contingent needs; Use of other on-balance sheet and off-balance sheet instruments for liquidity; Developing suitable investment management strategies to synchronize with liquidity needs

Unit V: Liquidity Management - Objective of Liquidity Management - i) Liquidity management policies and plans, ii) Recognizing distinct liquidity needs - short, intermediate and long, iii) Recognizing distinct group of liquidity sources: liquidity through fresh borrowings, liquidity through repayments from borrowers, liquidity through statutory reserves. Determination of optimal level of liquidity in terms of CRR and SLR.

Unit VI: Interest rate management -Fundamental factors affecting interest rates - Concept of interest, time, liquidity preferences, role of expectation in the interest rate formation, nominal and real interest rates, interest rate theories, role of the central bank in liquidity management, Role of Money Market and sources of liquidity in the Indian money market, RBI's policy and impact of Liquidity Adjustment Facility (LAF)

Suggested Readings

1. Financial Management- Theory and Practice, 6th Ed., - Prasanna Chandra
2. Financial Management- Theory and Practice, Khan & Jain
3. Finance for Managers - Harvard Business Essentials
4. BUSINESS MASTERMINDS: WARREN BUFFETT by heller robert
5. Financial Management- I M Pandey
6. Treasury Management & Risk Management by Trivedi & Hasan, Genesis Publishers, Mumbai. – Paper V

Group H: SP03: Laws and Regulations to Banking

Unit I: RBI Act, BR Act, NI Act, FERA, FEMA, Laws relating to NRI Accounts.

Unit II: Clearing House for settlement between banks; Transfer of funds between different places including places in foreign countries.

Unit III: Laws relating to gross real Time Settlement System. Universal Banking, Core Banking Services, International Standard Practices for Bankers

Unit IV: Foreign Bills, Export Finance, Laws pertaining to settlement of Export Bills. Laws relating to shipment, letter of credit and Operation of UCPDC 500.

Unit V: NASTRO and VASTRO accounts SWIFT, CHIPS, CHAPS, FEDWIRE.

Unit VI: Cyber Laws as applicable to Banks; Various other laws relating to Banking transactions and procedures. Know Your Customer; Bankers relation with customers; Need for better services; Consumer Protection Act 1986 as applicable to banking transactions.

Suggested Readings

1. Law & Practice Relating to Author: M.R. Umarji, Securitisation of Fimamcail Assets & Publishers: Taxmann Allied Services, Enforcement of Security Interest. New Delhi
2. Practical Approach to Securitisation and Reconstruction of Financial and Enforcement of Security Management in Banks/FIs by B.C. Kohli, Taxmann Allied Services, Delhi.
3. S.K. Krishnamurthi Aiyar's law relating to Negotiable Instruments Act, by S.K. Savaria, Universal Law Publishing Co.
4. User's Manual on foreign exchange Management Act, 1999 by R.R. Beedu, Snowwhite.
5. Banking Regulation Act 1949
6. Reserve Bank of India Act, 1935.

Group H: SP04: Basics of Financial Accounting for Bankers

Unit I: Basics of Business Accounts- Calculation of Simple Interest, Bank Discount, Compound Interest, Ordinary Annuities, Other Annuities, Amortization and Sinking Funds; Bonds, Calculation of YTM, Duration, Bond Pricing, Premium and Discount.

Unit II: Subsidiary Books- Maintenance of Cash/Subsidiary Books and Ledger Record Keeping Basics, Account Categories, Debit and Credit Concepts, Account and Columnar Accounting Mechanics, Journalizing - Writing Cash Books, etc.

Unit III: Reconciliation of Statements- Bank Reconciliation Statement, Trial Balance, Adjusting and Closing Entries; Capital & Revenue Expenditure/Depreciation/Inventory Valuation/Bills of exchange/Consignment/Joint Venture.

Unit IV: Special Accounts – Leasing and Hire Purchase Company Accounts, Accounts of Non-Trading Concerns – Receipts and Payments.

Unit V: Final Accounts- Balance Sheet Structure, Accounts, Categories, Assets, Liabilities and Net Worth Components/Partnership Accounts, Partner's Fixed Capital Accounts, Current Accounts, Loan Accounts, Treatment of Intangible like Goodwill etc. Final Accounts of Banking Companies, Accounting in a computerized environment, Methods, Procedures.

Unit VI: Norms of Corporate Governance in Banking - Preparation of statement of accounts as per the revised norms in the globalized context, Submission of Returns to RBI and Government Authorities as per the Legal Provision of various Acts. CG reporting Study of recent annual reports of public and private sector banks

Suggested Readings

1. Taxmann's risk based internal audit in banks by D.P. Gupta & R.k. Gupta, Taxmann.
2. Options, Futures and Other Derivatives, John C. Hull Prentice-Hall of India, 2006. (With CD)
3. Management Accounting & Financial Management by Shri K. Ganesan et al, IIBF, Mumbai.
4. Finance of International Trade by Paul Cowdell et al., A.I.T.B.S Publishers
5. Inflation Accounting in a Developing Economy: A Study of India by L. S. Porwal and N. Mishra
6. Financial Accounting for Bankers (Edge Development Group Credit Skills)

Group H: SP05: Portfolio Management

Unit I: An Overview- Nature and Scope of Investment Decisions Components of Investment Risk.

Unit II: Securities Market in India & Valuation of Securities as per the prescribed norms and the problems related to it.. Organisation and Functioning of Credit Rating Agencies; Regulation of Services.

Unit III: Analysis for Equity Investment – I & II- Economy and Industry Analysis, Company Level Analysis.

Technical Analysis, Efficient Market Hypothesis Case

Unit IV: Portfolio & Capital Market Theory- Portfolio Analysis, Portfolio Selection. Concept of capital market theory, Portfolio Revision.

Unit V: Institutional and Managed Portfolio- Performance Evaluation of Managed Portfolios, investment Companies., Mutual Funds, UTI, LIC, ICICI and Private Sector MF's.

Unit VI: Treasury Management- Concept and Methods adopted Problems and Resolution.

Suggested Readings:

1. RISK MANAGEMENT: Publishers Macmillan India Limited, 2/10 Ansari Road, Daryaganj, New Delhi - 110 002.
2. Forex Management and Business Strategy by Deepak Tandon, Skylark Publications, New Delhi – 1 –paper V
3. Financial Risk Manual: Prospect by John Holliwel, Pearson Education. paper-V
4. Portfolio construction, management & protection by Robert A. Strong, Thomson Asia Pte
5. Financial Institutions Management: a risk management approach by Anthony Saunders & Matricia Millon Cornett, McGraw Hill. – Paper V
6. Foreign exchange international finance risk management by A.V. Rajwade, Academy Business Studies
7. Credit Risk Management by Arundeepsingh and N.S. Toor, Skylark Publications
8. Quantitative Equity Portfolio Management (McGraw-Hill Library of Investment and Finance) by Ludwig B Chincarini and Daehwan Kim
9. Investment Analysis and Portfolio Management by Frank K. Reilly

GROUP I: AGRI-BUSINESS MANAGEMENT

Group I: SP01: Agro-Input Management

Unit1: Fertilizers: Introduction, Concept of Agricultural Inputs; Role of fertilizer in agri production, raw materials needed for and principles of manufacture of nitrogen, phosphatic, and potassic fertilizers, secondary nutrient sources and micronutrients formulation; infrastructures for marketing and distribution of fertilizers; fertilizer quality control and pricing policy, constraints in fertilizer use and emerging scenario of fertilizer use, scope of bio-fertilizers; environmental pollution due to fertilizers. fertilizer sampling, quality evaluation, formulation of fertilizer mixture, and methods of fertilizer recommendation for crops, study of fertilizer marketing systems.

Unit 2: Agro-Input Management: Demand and supply scenario of major agro inputs seed, fertilizers, agrochemical tractor and other farm machines, pricing agro inputs; information system for agro-input marketing, Role of trade fairs like Agro Vision.

Unit 3: Agro-Chemicals & Technology Management: Role, status and organisation of agro-chemical industry in the Country; alternate of novel methods of pest control, integrated pest management; role of biological controls as plant protection methods; methods of quality control qualitative and quantitative agrochemicals and residue analysis; guidelines for the use of agrochemicals, environment; adulteration and legal requirements.

Unit 4: Seed Production Technology: Importance of quality seeds in agriculture; principles and methods of seed production of cereals, pulses, oilseeds and miscellaneous field crops; principles of seed certification and certification agency, seed laws and seed law enforcement; seed processing drying, cleaning, grading, treatment, weighing, bagging and handling of seeds;

Unit 5: Seed Processing: Installation and management of seed processing plants- Seed storage; loss of seed viability during storage; seed packaging storing breeder, foundation and certified seeds; Seed industry in India-present status and future prospects

Unit 6: managing seed industry: Role of public, private and cooperative sectors; national policy and programmes seed demand and supply; forecasting seed demands; seed trade and export potential, organization of seed industry in India; Human resource development in seed industry, managing seed industry efficiently.

Suggested Readings

1. Agri Business Management/Himanshu. Jaipur, Ritu
2. Encyclopaedia of Agricultural Marketing : Marketing of Farm Inputs Seed, Fertilizer and Irrigation, Vo. IX/Jagdish Prasad
3. Advances in Seed Science and Technology, Vol. I : Recent Trends in Seed Technology and Management/edited by K. Vanangamudi, N. Natarajan, K. Natarajan, A. Bharathi, R. Umarani and T. Saravanan
4. Seed Technology/Dhirendra Khare and Mohan S. Bhale
5. Plant Compost-Manure and Agro-Chemicals Analysis : A Laboratory Manual/P.K. Behera
6. Agro Based Hand Book of Cultivation, Plantation and Farming : With Directory of Manufacturers/Suppliers of Agricultural Equipments & Implements and Suppliers of Agricultural Fertilizer, Seeds, Chemicals etc
7. Industrial Agriculture/Payman Mahasti

Group I: SP02: Livestock Management

Unit 1: Livestock Industry: Present status of livestock products industry in India-dairy, meat, poultry, skin, hides,- wool; selection of livestock type, production and processing units; processing industry in India; alternate production and processing technology; demand scenario for livestock products in domestic and global markets; improvement in products through disease control;

Unit 2 :Feed Business Management: Role of management in feed manufacturing industry, organizing and planning feed manufacturing unit with special emphasis on design of manufacturing processes, equipment, material handling and physical facilities, control procedures in feed manufacturing units with emphasis on inventory management, developing and evaluation of purchasing organisations system, planning and production of good quality feeds, quality control of raw material and finished products, regulations relating to the manufacture and sale of feed stuff

Unit 3: Storage and transport: Veterinary advisory services, extension activities, quality control system; packaging, preservation and storage systems for livestock products; transport means for domestic and global markets; quality control during storage & transit; extent of losses during storage and transport and ways to minimize the same; slaughtering and processing-plant design and operations; treatment of by-products; marketing and distribution of animal products existing and desired; quality standards for various products, and environmental and legal issues.

Unit 4: Poultry and Hatchery Management: Poultry and hatchery industry, role of management in poultry industry establishing a poultry and hatchery unit -location, size and construction, equipment and physical facilities, organizing and managing poultry. Incubation and hatching, production of quality chicks and eggs, factors affecting hatchability, bio security and hatchery sanitation, handling of hatching eggs,

Unit 5: maintaining chick quality: -chick grading, sexing, packing, dispatch, transportation and chick delivery, franchise hatcheries, custom hatching, brooding, growing and laying management, crises management, industrial feeding, housing and disease management, waste management, record management accounting and budgetary control, risks and insurance, personnel management including wages and salaries, job evaluation and employee appraisal,

Unit 6: Marketing of Livestock: Direct sale and sale through franchisees/ agents, advertisement, sale and after sale services, other innovative sales strategies. Management- direct sale and sale through franchisees/agents, advertisement, sale services, other innovative sales . recent trends

Suggested Readings

1. Livestock Feeding Strategies for Dry Regions/edited by P.S. Pathak and S.S. Kundu
2. Trends in Livestock Research/S.K. Kaushish
3. Livestock Economy of India/P.C. Bansil and S.P. Malhotra
4. Sustainable Agriculture: Status and Prospects/P.N. Kalla, Anita Singh, S.S. Pareek, Shanti K. Sharma and Hanuman Ram
5. Hand Book of Poultry Farming and Feed Formulations
6. The Complete Technology Book of Dairy and Poultry Industries : With Farming and Processing
7. Fertility and Hatchability of Chicken and Turkey Eggs/Lewis W. Taylor

Group I: SP03: Floriculture, Biotech and Food processing Units

Unit 1: Management of Floriculture and Landscaping: Recent advances in floriculture industry; evolution of new cultivators and production technology of ornamental plants; commercial cultivation of flower crops: rose, gladiolus, tuberose, marigold, aster, carnation, cilium chrysanthemum special techniques for forcing of dehydration of flowers; response of flowers to environmental conditions; landscape gardening; style of gardening,

Unit 2 Flower Management: An aesthetic and Socio- aesthetic newly developed towns and cities;, use of plant sircquluors flower production, extraction, purification and storage of essential oils and perfumes; post harvest changes in cut flowers, storage and packing of cut flowers determining optimum time harvesting of flowers for export and home use.

Unit 3: Management of Biotech Industries: Agricultural needs & application of biotechnology for agricultural uses and benefits; tissue culture, disease surveillance and diagnostics industries bioprocess engineering and quality products and productivity based industries, their structure, quality parameters, marketing, Intellectual Property Rights bio-diversity concepts and social and legal implications.

Unit 4: Food Technology : Present status of food industry in India; organisational structure of agro industry; major dimensions of agro based industries; risk management; unit operations of food industry; deteriorative factors and their control; laws and regulation related to food industry; quality management in food industry-quality standards and ISO:

Unit 5: Processing Management: Principles of food preservation and' processing; preservation through temperature reduction, water removal, radiation, heat processing, fermentation and use of preservatives, technology of extrusion, solvent extraction, refining and hydrogenation; processing of dairy products; cereals milling; pulse milling; oil seeds crushing; processing of fruits and vegetable; confectionery; tea and coffee processing; food additive and toxicology; protection of food during storage, and transportation; packaging distribution of food products.

Unit 6: Fruit Production & Post-Harvest Management: Present status of fruit industry in India and emerging scenario; major fruit growing zones, management of fruit production technology for domestic and global market; post harvest handling technology harvesting, pre-cooling, grading, packing, storage and transportation for cooling, grading, packing, storage and transportation, pre and post harvest management for quality and shelf life; fruit processing industry; international trade in fruits problems and prospects and global marketing of fruits, and government policy, incentives domestic and global trade.

Suggested Readings

1. vFood Processing and Preservation/Neelam Khetarpaul
2. Modern Technology of Food Processing and Agro Based Industries
3. Fruit Production : Problems and Solutions/R.R. Sharma
4. Post-Harvest Management of Horticultural Crops/edited by M.A. Mir, G.M. Beigh, Hafiza Ahsan, Qazi Nissar Ahmad, H.R. Naik and Abdul Hamid Rather
5. Emerging Trends in Post Harvest Processing and Utilization of Plant Foods/Neelam Khetarpaul, R.B. Grewal, Sudesh Jood and Umaid Singh
6. Post Harvest Technology of Vegetables/Manoranjan Kalia
7. Food Processing/Vikas Ahlluwalia

Group I: SP04: Financial Management for Agri Business

Unit I: Introduction to financial management, objectives functions, interface of financial management with other functional areas; preparation of financial statements- balance sheet, income statement, funds flow statement, cash flow statement

Unit II : financial statement analysis- ratio analysis, time series analysis common size analysis, du-Pont-analysis, difficulties associated financial statement analysis, leverage-concept of leverage, operating leverage, financial total leverage, financial leverage and risk, relationship between risk and return., profit analysis, monitoring costs and sales through variance analysis.

Unit III : financial forecasting -sale forecast, preparations of Proforma balance sheet and income statement, growth and external funds requirements. Capital structure- introduction, factors affecting capital structure, features of an optimal capital structure, capital structure theories; sources of long term finance capital-equity capital and preference capital, debenture, term loans and deferred credit and hire purchase.

Unit IV: Working capital, determinants of the size of working capital the composition of working capital; managing working capital conservative vs. aggressive policies, static vs. dynamic view of working capital, operating cycle, approach to working capital, inventory management, receivable management and cash management and cash management, dividend decision, financing of working capital-accruals, trade credit, provisions, short term bank finance, public deposits, commercial paper, factoring, regulation of bank credit.

Unit V: Capital expenditure decisions- process of capital budgeting, basic principles in estimating costs and benefits of investments, appraisal criteria -pay back period, average rate of return; net present value, benefit cost ratio, internal rate of return, annual capital charge.

Unit VI : Agri-business financing system in India -(a) Financial markets, money and capital markets (b) regional and all India financial institutions: commercial banks, regional rural banks, NABARD, AFC, Cooperatives' (NCDC and other institutes) Agro-Industries (Corporation, IDBI, IFCI, ICICI, SFCs, SIDCs, (c) investment institution: LIC,GIC, mutual funds, commercial bank, non banking financial companies.

Suggested Readings

1. Financial Management- Theory and Practice, 6th Ed., - Prasanna Chandra
2. Financial Management- Theory and Practice, Khan & Jain
3. Economics of India Catalogue
4. Dictionary of Agribusiness Management/L.L. Somani
5. Micro-Enterprise Promotion in Agriculture : Indian Imperatives and Global Perspective/J.P. Sharma, C.B. Singh, Meenakshi Chaudhary and Rashmi Singh
6. NABARD and Rural Transformation/N. Lalitha and R. Dayanandan
7. Agricultural Credit and NABARD/Tapan Kumar Shandilya and Umesh Prasad

Group I: SP05: Trends in Agri Business

Unit I: Agriculture Development in South Asia; Trends in India: Land Development Banks, Crop Loans ; Productivity of Credit; Three 'R's of Credit; Regional Rural Bank; Co-operative Banks: State Cooperative Banks, District Central Cooperative Bank, Village Cooperative Credit Society;

Unit II: Insurance: Crop Insurance, Cattle Insurance and Life Insurance; Microfinance: History of social banking, relationship with poverty alleviation; Concept of Micro-Credit; Trends in Organic Farming in India

Unit III: NABARD: Establishment, Capital and Management, Operations, Resources;

Unit IV: Rural Marketing, Agri-Input Marketing, Supply Chain Management, International Trade in Agri -Commodities,

Unit V: Agri-Entrepreneurship, Role of NGO's in Agri-Business Management, Rural Research Methods, Procurement Management, Agribusiness Risk Management, Emerging Issues in Agribusiness and Food Industry, Commodity Futures, Agriculture Project Management; Contract Farming,

Unit VI: Sectoral Studies: Organized Retail, Banking and Finance, Agri-Input Supply, Food Processing; Company Profiles: Standard Chartered, Reliance, Aditya Birla Retail, Nestle, Cognizant, Godrej Agrovet,

Suggested Readings

1. Trends in Organic Farming in India/edited by S.S. Purohit and Dushyent Gehlot. Jodhpur, Agrobios, 2006
2. Crop Insurance in India : An Analysis
3. Agricultural Development in South Asia: A Comparative Study in the Green Revolution Experiences/Jasbir Singh. 1997
4. Rural Banking and Over Dues Management/edited by A. Ranga Reddy
5. Condition of Indian Peasantry/G.S. Bhalla
6. Microfinance Systems : Designing Quality Financial Services for the Poor/Graham A.N. Wright
7. Attacking Poverty with Microcredit/edited by Salehuddin Ahmed and M.A. Hakim

At the end of first year, students have to undergo two months of internship in agribusiness or food companies. In addition, two weeks field-stay in rural area to get hands-on experience of the sector

Group J: Power Management

Group J: SP01: Conventional and Non-Conventional Renewable Energy Systems

Unit I : Steam power stations: - Site selection, Prime movers, Arrangement of plant and principle auxiliaries, Operating costs.

Unit II : Hydro power stations: - Site selection, Prime movers, Arrangement of plant and principle auxiliaries, Operating costs, Surge tank and penstock.

Unit III : Nuclear power stations: - Fission and fusion technology fundamentals, Layout and reactors, Prospects and limitations.

Unit IV : Major non-conventional energy sources: - Solar energy, Wind Energy: - Principles, Scope and Availability.

Unit V : Other non-conventional/Renewable energy sources: - Ocean thermal energy, Tidal and wave energy, Geothermal energy, Principles, Scope and Availability.

Unit VI : Bio-energy: - Biomass and its uses, Classification of biomass as energy sources, Characteristics of bio-mass and its conversion process.

Suggested Readings

1. Generation of electrical energy by B.R. Gupta..
2. Elements of Power system design by M.V. Deshpande
3. Power Stations by Domkundwar
4. Renewable energy sources by Twidell and Weir, engineering language book society, London.
5. Energy Technology by S. Rao and Parulekar

Group J: SP02: Energy Audit and Management

Unit I : General energy problem, energy use pattern of various types of consumers, scope for energy conservation.

Unit II : Energy Audit, Energy monitoring, energy accounting and analysis.

Unit III : Auditing and targeting of electrical energy, electrical energy conservation in building and industries.

Unit IV : Load curve analysis and load management, energy efficient drives, Tariffs and power factor improvement.

Unit V : Economic operation of power plant operation, Economic scheduling of power stations.

Unit VI : Economic operation of power system, Demand side management: - Concepts, planning and implementation methods.

Suggested Readings:

1. Generation of electrical energy by B.R. Gupta..
2. Energy and energy resource management by Mahajan, Agnihotri, Atparia. Deep and Deep publication P.Ltd.
3. Power Stations by Domkundwar
4. Energy Management by Paul W. and O'Callaghan, McGraw Hill, N.D.

Group J: SP03: Energy Systems Planning

Unit I : Energy, economy and environment interaction, environmental repercussions and the economic structure, Criteria for economic growth.

Unit II : Energy Models: - Econometric models, Techno-economic models. Energy analysis using input-output models

Unit III : Models for energy policy: - Introduction, Systems perspective on energy.

Unit IV: Data base requirements and survey of energy requirements at National, Regional and Settlement level.

Unit V : Energy planning process at National, Regional and Settlement level.

Unit VI : Energy planning for Industries and Agriculture.

Suggested Readings:

1. Renewable energy by A.K.N. Reddy and Johanson, Earth Scan Publication
2. Tata Energy Research Institute Journals
3. Energy and Economic development: What Next : Jyoti Parikh
4. Energy and energy resource management by Mahajan, Agnihotri, Atparia. Deep and Deep publication P.Ltd.
5. Energy consumption in India (Pattern & Determinants) by Raikhy and Singh, Deep and Deep publication P.Ltd.

Group J: SP04: Power Pricing & Power Purchase Agreements

Unit I : Present energy pricing scenario in India and world, Coal Pricing, Gas pricing, Oil pricing, history of energy pricing mechanism- Indian and world.

Unit II : Basic theory of energy pricing models, pricing under various environments, cost and supply analysis, price and output determination.

Unit III : Types of electricity, Tariff structure- fixed tariff, availability based tariff, time of the day tariff, long term tariff, etc., Regulatory frame work and aspects of tariff setting.

Unit IV : Requirements of PPA, Risk and responsibilities in a power purchase agreement, Desirable principles of power purchase agreements.

Unit V : Assessment of Tariff levels Scope of the PPA, Articles and schedules of a model PPA Definition and interpretation of terms of a model PPA.

Unit VI : Negotiating Power purchase agreements PPA- Financial and legal issues, Drafting of a model PPA.

Suggested Readings:

1. Document of CERC-2000 CERC Publisher.
2. Managerial economics by GS Gupta, Tata McGraw Hill publishing Co. Ltd.
3. Energy pricing in India by Herry sarkar and Gopal K. Kadekoli-publisher- United National Development Program & Economic commission for Pacific and Asia.

Group J: SP05: Power Environment Interface

Unit I : Environment polices and regulatory framework, Global perspective and environmental guidelines. Regulatory framework and acts, Interface with govt. regulating agencies, public, academic and research institutions, ISO 14000;

Unit II : Environmental concerns Greenhouse effect, Water pollution, Ecological imbalance, Deforestation ,

Unit III : Environmental impact assessment, Investment decisions concerning environmental protection, Environmental economics

Unit IV : Thermal Environmental Interface: Pollutant in power plant, particulate and gaseous pollutants, thermal pollution , solid gas pollution,

Unit V : strategies to control pollutants from coal based power plants pollution control methods, Ash handling and utilization;

Unit VI : Hydro Environment Interface: Submergence, soil erosion, loss of flora and fauna, Riverine ecology, Social impact Landscape , Resettlement and rehabilitation.

Suggested Readings:

1. Energy: Dolittle , Matrix publisher.
2. Energy and Environment: McGraw Hill.
3. Energy and Environment: Carter, Drandis Universal Press.
4. Air Pollution control: Ressamo, McGraw Hill.
5. Protecting our Environment: McGlannan, silson company