Semester -III

Paper 1: Applied Operations Research

SECTION - A

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 I - Rules of Network Construction, Network Analysis (Forward Pass, Backward Pass, Critical Paths and Floats).

Unit III: PERT/CPM II - Resource Analysis and Allocation (Crashing), Probability in PERT, PERT vs. CPM.

Unit IV: Replacement I - Replacement Policies: Equipment Deteriorate Gradually, Time Value of Money Considered.

Unit V: Replacement II - Equipment Fail Suddenly (Group Replacement), Staff Replacement. SECTION - B

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

Unit VII: Simulation I - Introduction, Simulation Process, Monte Carlo Simulation, Generation of Random Numbers, Queuing Model $[M/M/1: (\infty/FCFS)]$, Simulation of Queuing System.

Unit VIII: Simulation II - Simulation of Inventory System, Simulation of Investment Problems, Advantages and Disadvantages of Simulation, Applications of Simulation.

Unit IX: Dynamic Programming - Concept, Dynamic Programming & Resource Allocation, Dynamic Programming vs. Linear Programming.

Unit X: Application of Computer in ORT - Introduction, Packages, Practical Use of these Packages.

Paper 2: Entrepreneurial Development

SECTION A

Unit I: Entrepreneurship - Creativity and Innovation, Relationship with the Economic Development, Barriers to Entrepreneurship (Factors affecting Growth of Entrepreneurship), Theory of Achievement Motivation, McClelland's Experiments, Women Entrepreneur's.

Unit II: Entrepreneurship Trends - Strategic Management, Forms of Ownerships, Franchising, Mergers and Acquisitions, Types of Entrepreneurship, Career Planning, Choice of Entrepreneurship as a Career, Cases from Indian Industry.

Unit III: Business Idea - Identifying & Developing Entrepreneurial Potential, Business Ideas Generation Process, Evaluation of Business Idea.

Unit IV: Business Plan - The ED Cycle, Building the Business Plan, Venturing an Enterprise, Financial Considerations (Cash Flow Management, Financial Plan, Business Plan).

Unit V: Entrepreneurial Support Systems - Activities of SIDBI, EDI, NIESBUD, DIC, NABARD Government policy, Agency supporting entrepreneurial development Industrial estates.

SECTION B

Unit VI: Location and Layout Decisions - Location decisions for Manufacturing, Retail and Services Business, Layout and Design Considerations, Build, Buy or Lease Decisions.

Unit VII: Entrepreneurship in India - Entrepreneurship Development in India: Issues and Opportunities, Small-Scale Sector in India, The NGO Factor in EDP-INDIA Corporate Social Responsibility (CSR): NGO's in India, Social Responsibility of Entrepreneurs, CSR.

Unit VIII: The Industry and Ancillarization Entrepreneurship & Industry, Ancillarization, Ancillarization in India, Ancillaries & Industrial Development, Ancillary Opportunities in different Economic Sectors: Agro Industries, Logistics, BPO, Banking and Finance, Subcontracting System, Supplier Organization Network Global Aspect of Entrepreneurship.

Unit IX: Financial incentives - Backward area benefits, Schemes for educated unemployed, Fiscal incentives, Procurement of industrial equipment, marketing support.

Unit X: Entrepreneurial behaviour - Techno economics innovation and entrepreneurship, Socio-psychological factors influencing entrepreneurship development.

1. S.S. Khanka – Entrepreneurial Development (S. Chand & Co.)

Paper 3: Strategic Management

SECTION - A

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

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

Unit III: Internal & 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

Unit IV: External 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 V: 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.

SECTION - B

Unit VI: 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 VII: 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 VIII: Global strategy - Reasons for globalization, Global expansion strategy, International Portfolio Analysis; Market entry strategy, International strategy & competitive advantage.

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

Unit X: 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.

Paper 4: Business Ethics & Corporate Governance

SECTION A

Unit I: Ethics - An introduction, Concept of ethics, Values & Ethics - Meaning & Types of Values, Ethical Action-Morals, Morality, Moral development pyramid, Beliefs, Religiousness and Law.

Linit II: Ethical Decision Making Normative Framework Principle of personal benefit

Unit II: Ethical Decision Making - Normative Framework -Principle of personal benefit, Principle of Social Benefit, Principle of Neutralization, Categorical Imperative, Principle of Duty, Principle of Justice and Principle of Lawfulness. Approaches / Theories of ethics - Gandhian Approach, Friedman's Economic theory, Kant's Deontological theory, Mill & Bentham's Utilitarianism theory, Aristotle's Virtue based ethics and Narrative based ethics - Case studies on inspirational life stories of individuals.

Unit III: Business Ethics - Ethics in Business - Myth & Reality, The Indian Business scene, Ethical Concerns, LPG & Global trends in business ethics, Business ethics rating in India.

Unit IV: Organizational Ethics - Organizations Organization culture, Types of Organization, Corporate code of ethics - Formulating, Advantages, implementation Professionalism and professional ethics code.

Unit V: Business & Society - Business & its stakeholders, Social Responsibility - Concept of CSR, Public Policy approach & role of NGO, Environmental Ethics - concerns, issues & case studies.

SECTION B

Unit VI: Corporate Governance - Objectives , issues, features, Corporate Governance codes - Cadbury report, CII recommendations ,Corporate Governance for public sector, Corporate Governance & Investment - ethical investing, Insider trading, Case studies - Tata Finance, Enron case & UTI case.

Unit VII: Ethical Issues in Marketing - Introduction; Principles of Ethical Marketing; Ethical approaches to buyer- seller relationship; Ethics in Pricing; Ethics in product labeling and packing; Ethics in dealership decision; Ethics in promotion; Social and Ethical criticism of Advertising & Media, Ethics in Marketing research; Green Marketing; Alcohol and Tobacco Promotion.

Unit VIII: Ethical Issues in HRM - The Ethical Organisation in the Boundary less World Ethics in Recruitment and Selection, the Employment Interview, Nepotism. Occupational Testing and Psychometric Instruments: an Ethical Perspective; Ethics and Equality - Gender Bias, Sexual Harassment, Discrimination, Affirmative Action HRM and Employee Well-Being - Civil Liberties, Flexible Working Patterns, Presenteeism and the Impact of Long Working Hours on Managers, Dichotomy, Professional Loyalty The New Pay: Risk and Representation at Work; Conditions of Worth and the Performance Management Paradox; Employee Participation and Involvement.

Unit IX: Ethical Issues in IT - Ethical Issues in IT & ITES - Privacy, Accuracy, Accessibility, Property, Security Threats, Computer crimes & Preventing it, Software Piracy & Hacking, Internet Crimes & Computer Abuse, Ethics for IT Professionals & Its users. Ethics in Intellectual Property Rights, Designs, Patents, Trademarks, Copyrights.

Unit X: Ethical Issues in Industry - Ethical issues in Production management Services, Product Design, Features, Quality standards, Safety, Obligation to inform consumer, Ford Pintocase; Ethics Audit – Formal committees, Auditing Process.

Paper 5: Public System Management

SECTION A

Unit I: Introduction - 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.

Unit II: Public Enterprise Management - Objectives and Roles of Public Enterprise, Organizational Forms and Working of the Board of Management, Public Enterprise Policy and Reform Measures, Marketing Problems of Public Enterprises; Cases: Western Coalfields Limited (WCL), MECL, MOIL and MSEB etc.

Unit III: Energy 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; Utilization of solar energy; Biomass as a source of energy; The option of Nuclear energy in the developing countries; Case: Suzlon.

Unit IV: Water Resource Management - 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; Problem relating to supply and timely use of water in cities and towns. Cases: Jalswaraj by Govt. of India, Sardar Sarovar, Bhakra Nangal and Maharashtra Jivan Pradhikaran.

Unit V: 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.

SECTION B

Unit VI: 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 VII: Health Systems Management - System analysis and system dynamics in health care; Health system: Characteristics, Planning methodologies, Goals and functions; Strategic management in health care; Quantitative foundations of health services management; Case: NHS (UK).

Unit VIII: Public Infrastructure Management-1 – Definition; Local, Regional, State and Federal Agencies responsible for infrastructure development and their role in Regional Planning Process; The role of Civic Organizations and Private Sector; Overview of the Infrastructure Management Process.

Unit IX: Public Infrastructure Management-2 - 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 X: 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.

Paper 6: Project Management and Quality Management

SECTION A

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

Unit II: Project Management Standard – Processes, Process Groups, Process Interactions and Process Mapping.

Unit III: Knowledge Areas I – Process Flow Diagram; Plan, Direct, Manage, Monitor, Control and Close a Project.

Unit IV: Knowledge Areas II – Scope; Time Management: Activity Sequencing, Resource and Duration Estimation; Cost vs. Quality Management in Projects.

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

SECTION B

Unit VI: 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 VII: Problem solving techniques for Quality Management - Pareto Analysis, Ishikawa (Cause/Effect) Diagrams, Failure Modes and Effects Analysis, Brainstorming, Program for Quality Improving, Contributions: Deming and Juran.

Unit VIII: 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 IX: Quality Techniques - Indian Quality Standards, Japanese vs. American Techniques, KAIZEN, Six Sigma: Design, Measure, Analysis, Improve and Control Phases; TOYOTA WAY.

Unit X: Standards and Certifications - 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.

Specialization GROUP A:(MARKETING)

Retail Management

SECTION A

Unit I: Introduction to Retail Management - Retail & Retailing – definitions, Meaning of Retail Mix, Growth of Retail Industry, Factors responsible for changes in retailing, Challenges & Opportunities to Retail Industry.

Unit II: Store Retail Formats - Independent/ Stand alone outlet, Convenience Store, Supermarket, Discount Store, Off-price retailer, Department Store, Corporate chains, Consumer co-operatives, Shopping malls, Hypermarkets, Catalogue showroom, Franchising.

Unit III: Non-store Retail Formats - Multi-Level marketing, e-tailing, Tele-shopping, Automatic Vending Machines, Direct Mail Marketing.

Unit IV: Retail Planning - Retail Planning Process, Retail Finance, Location Selection Decision, Lay-out Planning.

Unit V: Studying Consumer Behaviour & Other Related Issues in Retailing -Understanding Consumer Behaviour, Cultural & Social Group influence on Consumer Purchase Behaviour, Consumerism & Ethics in Retailing.

SECTION B

Unit VI: Strategic Issues in Retailing - Development of Retail Brand, Implementation of CRM, Retail Pricing, Financial Implications of Retail Strategy, Retail Supply Chain.

Unit VII: Merchandise Management - Merchandise Mix, Category Management, the concept of SKU, Assortment Planning Process, Vendor Management & Buying System.

Unit VIII: Store Management - Store Operations Management, Store Design- Interiors & Exteriors, Customer Services, Store Profitability, Retail Display, Visual Merchandising, Floor Management.

Unit IX: Retail Promotion - Planning Retail Promotions, Store Events & Sales Promotion, Retail Advertising.

Unit X: Technology in Retailing - Applications of IT in retailing, Coding Systems, RFID- Retail Applications.

Specialization GROUP B:(FINANCE)

Indian Financial System

SECTION A

Unit I: Components of formal financial system, Functions, Financial system design, Nature and role of financial institutions and financial markets, financial system and economic growth, Pre and post reform scene in financial markets.

Unit II: Money Markets - Treasury Bills and types, Commercial papers, Commercial bills, Certificate of deposit, Call / Notice money market, Money market intermediaries, Money markets and monitory policies in India, overview of money markets.

Unit III: Capital Markets - History of Indian capital markets, Capital market scams, Reforms in capital markets, Primary Markets – free pricing, book building, Private placements, Secondary Markets – Organization, membership, and management of stock exchanges, Listing, trading, clearing and settlement mechanism, Listing categories, BSE, NSE, OTCEI, ICSEI, measures to

boost liquidity in the secondary market, reforms in secondary markets and its impact, Internet trading.

Unit IV: Debt Markets - Introduction, History of Indian debt market, Debt market participants, Primary and secondary segment, The private Corporate debt market, The public sector undertaking bond market, The government securities Market, Issuance mechanism – auction, sale, private placement; Trading system, SGL A/c, PD system, steps to develop debt markets.

Unit V: Financial Regulation - SEBI – Management, powers and functions, Investor protection measures, achievements, JPC on SEBI; RBI – objectives, organization, role.

SECTION B

Unit VI: Financial Services - Meaning, need and importance, Miscellaneous Financial services: Factoring, Securitisation of debt, Plastic money, Venture Capital, Credit rating.

Unit VII: Merchant Banking - Origin and development of merchant banking in India scope, organizational aspects and importance of merchant bankers. Latest guidelines of SEBI w.r.t. Merchant bankers

Unit VIII: Mutual funds and AMCs- concept, origin and growth of mutual funds, constitution & management of MFs – Sponsors, Trustees, AMCs, and custodians; Classification of mutual fund schemes, advantages and disadvantages in mutual fund schemes, NAV and pricing of mutual fund units; State of mutual funds in India.

Unit IX: Depository - Introduction, Concept, depository participants, functioning of depository systems, Demat, Remat, process of switching over to depository systems, benefits, depository systems in India, SEBI regulation.

Unit X: Derivatives Market - Introduction, Markets in India, Forwards and futures - Concept, Terminology, Pricing, Future trading strategies; Options- types, salient features, Margins applicable, Terminology, Pricing; Derivatives trading in India.

Specialization GROUP C:(HUMAN RESOURCE)

Training & Development Practices

SECTION A

Unit I: Human Resource Demand & Supply - Demand Analysis, Models & Techniques of manpower demand forecasting, Status of existing manpower, Requirement of manpower in relation to Technological advancement, Sources of supply of manpower.

Unit II: 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 III: Training Need Analysis - Identification of training needs, Environment for training, Areas of training, Responsibilities for providing training, Training Calendar, Facilities for training.

Unit IV: Training Design - Perspectives for Designing Training, Designing a training programme, Objectives, components and methods of training designs, Training Process, Training of trainers (TOT).

Unit V: Training 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.

SECTION B

Unit VI: Skills of an Effective Trainer - Communication skills, Knowledge, Training styles, Power of Body Language, Developing creativity.

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

Unit VIII: Audit of Training Programme - Cost of training, Input-output ratio in relation to effectiveness, Productivity, HRD Audit.

Unit IX: Management Development Programmes - Concept & Importance of MDP's, Steps in MDP's, Methods and Techniques of MDP's, Prospective pitfalls, Effectiveness Audit.

Unit X: Training in Indian & International Organisation - National Perspective regarding current training and development practices, International Perspective, Projects – Evaluation of Training Modules presently being undertaken in various organizations.

Specialization GROUP D:(INFORMATION SYSTEM MANAGEMENT)

Innovations in IT

SECTION A

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 - Next Generation Mobile Networks, Heterogeneous Networks, Ad-Hoc & Sensor Networks, Wireless Networks: WiFi, WiMax, Cellular, 3G/4G.

Unit IV: Communication Technologies-II - 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.

 $\label{thm:condition} \begin{tabular}{ll} Unit V: Web Applications and Services-I - Internet Services and Applications, Web Services, Internet Computing, E-Learning , Middleware , Web Information Systems. \\ \end{tabular}$

SECTION B

Unit VI: Web Applications and Services-II - Web Based Software, Semantic Web, Agent-Oriented Computing, E-Business, E-Commerce & E-Government, Ontology Engineering, Portal Technologies.

Unit VII: 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 VIII: Pervasive and Ubiquitous Computing-I - Smart Appliances & Wearable Computers, Inter-Vehicular Communication, Personal Computing, Pervasive Wireless Networking, Opportunistic Systems, Ubiquitous Health Care.

Unit IX: Pervasive and Ubiquitous Computing-II - Ubiquitous Computing, Location-Based Services, Educational Gaming & Instructional Technologies, Context-Aware Environments and Devices, Personal Broadcasting, Autonomic Systems.

Unit X: 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.

Specialization GROUP E:(HEALTHCARE MANAGEMENT)

Health Systems Management

SECTION- A

Unit I: Systems analysis and systems dynamics in health care.

Unit II: Health systems: Characteristics, Planning methodologies, Goals and functions.

Unit III: Strategic management in health care.

Unit IV: Quantitative foundations of health services management.

Unit V: 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.

SECTION-B

Unit VI: Health care decision making for mega problems: Approaches. Unit VII: Contemporary trends in health care; Health Manpower policy.

Unit VIII: Planning and management.

Unit IX: Project Management in Health care.

Unit X: Case studies on any of the above topic.

Specialization GROUP F : (INTERNATIONAL BUSINESS MANAGEMENT)

International Marketing

SECTION- A

International Marketing –Definition, Concept and Setting; Distinctions between International Trade, Marketing and Business; Economic Environment of International Marketing; International Institution- World Bank, IMF. UNCTAD, GATT, Customs Union, Common Markets, Free Trade Zones, Economic Communities; Constraints on International Marketing-Fiscal and Non-fiscal Barriers, Non-tariff Barriers; Trading Partners- Bilateral Trade Agreements, Commodity Agreements and GSP.

SECTION-B

India and World Trade, Import and Export Policy, Direction and Quantum of India's Export; Institutional Infrastructure for Export Promotion; Export Promotion Councils, Public Sector Trading Agencies, ECGC, Commodity Boards etc; Procedure and Documents- Registration of Exporters, Export Quotations, Production and Clearance of Goods for Exports, Shipping and Transportation, Insurance, Negotiation of Documents; Instruments of Payments- Open Account, Bills of Exchange; Letter of Credit-Export Finance; International Marketing Mix- Identification of Markets, Product Policy, International Product Life Cycle, Promotion Strategy, Pricing Strategy and Distribution Strategy; Various Forms of International Business; Marketing of Joint Ventures and Turnkey Projects.

Specialization GROUP G: (OPERATIONS MANAGEMENT)

Total Quality Management

SECTION A

Unit I: Introduction to Quality Concepts - Definition of Quality, Dimensions of Quality, Quality Planning, Quality costs - Analysis Techniques for Quality Costs, Basic concepts of Total Quality Management, Historical Review, Principles of TQM, Leadership – Concepts, Role of Senior Management, Quality Council, Quality Statements, Strategic Planning, Deming Philosophy, Barriers to TQM Implementation.

Unit II: TQM Principles - Customer satisfaction - Customer Perception of Quality, Customer Complaints, Service Quality, Customer Retention, Employee Involvement - Motivation, Empowerment, Teams, Recognition and Reward, Performance Appraisal, Benefits, Continuous Process Improvement - Juran Trilogy, PDSA Cycle, 5S, Kaizen, Supplier Partnership - Partnering, sourcing, Supplier Selection, Supplier Rating, Relationship Development, Performance Measures - Basic Concepts, Strategy

Unit III: Quality Improvement Techniques - Pareto Diagrams, Cause-Effect Diagrams, Scatter Diagrams, Run Charts, Cause and Effect Diagrams.

Unit IV: Statistical Process Control (SPC) - The seven tools of quality, Statistical Fundamentals – Measures of central Tendency and Dispersion, Population and Sample, Normal Curve, Control Charts for variables and attributes, Process capability, New seven Management tools.

Unit V: Control Charts for Variables – Definitions, Variation: Common vs. Special Causes, Control Chart Techniques, X-bar and R chart Correlation, X-bar and S charts.

SECTION B

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

Unit VII: Quality Systems - Need for ISO 9000 and Other Quality Systems, ISO 9000:2000 Quality System - Elements, Implementation of Quality System, Documentation, Quality Auditing, QS 9000, ISO 14000 - Concept, Requirements and Benefits.

Unit VIII: Concept of six sigma - Introduction, Design for six sigma, key analytical tools for implementing six sigma, advantages of six sigma, six sigma DMAIC process

Unit IX: Quality Circles - Introduction, Quality Circles, Teams.

Unit X: Case study on above topics

Specialization GROUP H : (<u>BANKING & FINANCIAL SERVICES MANAGEMENT</u>) Laws and Regulations to Banking

SECTION A

Unit I: RBI Act, BR Act, NI Act, FERA, FEMA etc.

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.

Unit IV: Universal Banking, Core Banking Services, International Standard Practices for Bankers

Unit V: Foreign Bills, Export Finance, Laws pertaining to settlement of Export Bills.

SECTION B

Unit VI: Laws relating to shipment, letter of credit and Operation of UCPDC 500.

Unit VII: Laws relating to NRI Accounts.

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

Unit IX: Know Your Customer; Bankers relation with customers; Need for better services; Consumer Protection Act 1986 as applicable to banking transactions.

Unit X: Cyber Laws as applicable to Banks; Various other laws relating to Banking transactions and procedures.

Specialization GROUP I : (AGRI-BUSINESS MANAGEMENT)

Financial Management for Agri Business SECTION A 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, 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, 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.

SECTION B

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. 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. 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.

Specialization GROUP J : (POWER MANAGEMENT)

Power Environment Interface

SECTION A

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; Environmental concerns Greenhouse effect, Water pollution, Ecological imbalance, Deforestation , Environmental impact assessment, Investment decisions concerning environmental protection, Environmental economics

SECTION B

Thermal Environmental Interface: Pollutant in power plant, particulate and gaseous pollutants, thermal pollution , solid gas pollution, strategies to control pollutants from coal based power plants pollution control methods, Ash handling and utilization; Hydro Environment Interface: Submergence, soil erosion, loss of flora and fauna, Riverine ecology, Social impact Landscape , Resettlement and rehabilitation.