

SEMESTER III (Operation)

0203136: RESEARCH METHODOLOGY

Full Marks: 100

Research Methodology - An Introduction

Marks: 10

Introduction: definition, objectives, motives, characteristics, limitations; Types of Research; Research Approaches; Research Approaches and Significance of Research: Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical; Research Methods versus Methodology; Research and Scientific Method; Research Process; Criteria of Good Research; Problems Encountered by Researchers in India

Research Problem

Marks: 10

Defining: What is a Research Problem?, Selecting a Problem, Necessity of Defining a Problem, Technique Involved in Defining a Problem; Research Design: Meaning, need, features, important concepts related to it; Different Research Designs; Basic Principles of Experimental Designs

Sampling Fundamentals and Sampling Design

Marks: 14

Introduction: Need for Sampling, Definition, Important Sampling Distributions, Essentials of Good Samples, Central Limit Theorem; Methods of Sampling: random, non-random; Sampling Theory: Sandler's A Test, Concept of Standard Error; Sample Size and its Discrimination: Nature of Universe; Sampling Design: Census and Sample Survey, implications of sample design, steps, criteria, characteristics of a good sample design; Different Types of Sample Designs: Non-Probability, Probability, Determination of Appropriate

Measurement and Scaling Techniques

Marks: 14

Introduction: Measurement in Research, Meaning of Attitude; Measurement Scales: Selection of Measurement of Scale, Measurement of Scales; Sources of Error in Measurement: Respondent, Situation, Measurer, Instrument; Tests of Sound Measurement: Test of Validity, Test of Reliability, Test of Practicality, Technique of Developing Measurement Tools; Scaling: meaning, classification bases, Important Scaling Techniques; Scale Construction Techniques: Arbitrary Scales, Differential Scales (or Thurstone-type Scales), Summated Scales (or Likert-type Scales); Multidimensional Scaling

Methods of Data Collection

Marks: 18

Introduction; Meaning and Need for Data: Source of Data, Primary and Secondary Data, Methods and Techniques of Collection, of Primary Data, Observation Method, Interview Method; Collection of Data through Questionnaires: Merits and Demerits, Main Aspects, Essentials of a Good Questionnaire, Functions, Problem of Response Questionnaires, Pilot testing or Pre-testing, Specimen; Collection of Data through Schedules: Purpose of Schedule, Essentials of a Good Schedule, Difference between Questionnaires and Schedules; Collection of Data through Interview: purpose, kinds, technique; Collection of Data through Observation: Kinds of Observation in Social Research, Limitations of Observation as a Method of Social Research; Modern Methods of Data Collection; Other Methods of Data Collection; Collection of Secondary Data: reliability, suitability, adequacy; Selection of Appropriate Method for Data Collection; Case Study Method; Guidelines for Constructing Questionnaire/Schedule; Choice of Suitable Method

Processing and Analysing of Data

Marks: 13

Introduction: Processing Operations, Some Problems in Processing, Elements / Types of Analysis, Statistics in Research; Data Measuring: Measures of Central Tendency, Measures of Dispersion, Measures of Relationship; Regression Analysis:

Simple Regression Analysis, Multiple Correlation and Regression, Partial Correlation; Other Measures: Index Numbers, Time Series Analysis

Interpretation and Report Writing

Marks: 13

Introduction; Meaning of Interpretation: essentials, technique, precautions; Report Writing: purpose, meaning, Importance of Social Research Report, Significance, Different Steps in Writing Report, Layout of the Research Report; Types of Reports; Mechanics of Writing A Research Report; Characteristics of a Good Research Report; Precautions for Writing Research Reports; Presentation; Evaluation

Computer – Its Role in Research

Marks: 8

Introduction; Significance: Evolution of Computers, Computer System, Important Characteristics; Introduction to Binary Number System: Computations in Binary System, Binary Fractions; Computer Applications; Computers in Research: Phases of Research Process, Further Uses of Computers; Use of Internet in Research; Importance of Internet

Reference Books:

1. Dane, C. F., 2010. *Evaluating Research: Methodology for People Who Need to Read Research*. Sage Publications.
2. Geoffrey. R. and David. M., 2005. *Essentials of Research Design and Methodology*. Wiley Publishing.
3. Goddard, W., and Melville, S., 2004. *Research Methodology: An Introduction*. Juta and Company Ltd.
4. Jonker, J, and Pennink S., 2009. *The Essence of Research Methodology: A Concise Guide for Master and PhD Students in Management Science.*, Springer Publication.
5. Khan., *Research Methodology*. APH Publishing.
6. *Methodology: Integration of Methods and Techniques*, Pearson Education India.
7. Kumar, R., 2010. *Research Methodology: A Step-by-Step Guide for Beginners*. Sage Publication Ltd.
8. William, W., 2009. *Research Methods in Education*. Pearson Education India.

0203226: LEGAL ASPECTS OF BUSINESS

Full marks: 100

Indian Contract Act, 1872

Marks: 8

Introduction to Law; Contract and ‘Contract Act’; Nature of Law of Contracts: Proposal, Acceptance, Consideration, Void Agreement, Wagering Agreement, Minor’s Agreement; Essentials of Contract: Competent Parties, Free Consent, Lawful Consideration and Lawful Object, Not a Void Agreement; Discharge of Contracts; Legal Remedies for Breach of Contracts

Special Contracts

Marks: 10

Quasi Contracts: Types, Difference between Contracts and Quasi Contracts; Contract of Indemnity (Sec. 124): Parties to Indemnity Contract, Essentials of Contract of Indemnity, Rights of Indemnity Holder When Sued; Contract of Guarantee (Sec 126): Essentials of a Contract of Guarantee, Difference between Indemnity and Guarantee, Kinds of Guarantee, Rights of Surety, Rights of a Creditor Against Surety, Discharge of Surety; Bailment Contract: Duties of Bailor, Duties of Bailee; Rights of the Bailor: Rights of the Bailee, Rights of Bailor and Bailee against Wrongdoers, Types of Lien, of Lost Goods, Termination of Bailment; Contract of Pledge: Advantages of Pledge, Difference between Pledge and Bailment, and Duties of Pawnee, Rights and Duties of Pawnor, Pledge by Non-owners

Sales of Goods Act, 1930

Marks: 12

Introduction: Salient Features, Essentials of a Contract of Sale, Sale and Agreement to Sell, Sale and Hire-Purchase Agreement, Sale and Bailment, Sale and Barter Exchange; Formalities of a Contract of Sale: Goods, Effects of Destruction of Goods, Ascertainment of Price; Conditions and Warranties: Definition of Condition, Definition of Warranty, Distinction between Condition and Warranty; CAVEAT Emptor; Transfer of Property: Passing of Property from Seller to Buyer, Passing of Property in the Contract for Sale of Unascertained Goods [Section 23], Passing of the Property in Goods sent on Approval or 'On Sale or Return, Reservation of Right of Disposal, Passing of Risk [Section 26]; Provisions related to Performance of Contract of Sale: Rights of Unpaid Seller, 2 Auction Sale, Rules Regarding Delivery of Goods

Negotiable Instruments Act, 1881

Marks: 15

Introduction; Negotiable Instrument: Meaning, Characteristics, Types, Presumptions, Distinction between Bill of Exchange and Promissory Note, Distinction between Bills of Exchange and Cheque; Parties to a Negotiable Instrument; Liability of the Parties to Negotiable Instruments: Parties to Bill of Exchange, Parties to a Promissory Note, Parties to a Cheque, Capacities of Parties to the Negotiable Instruments; Liability of the Parties to Negotiable Instruments: Liability of the Drawer (Section 30), Liability of Drawee Cheque, Liability of Endorser [Section 35], Liability of Parties to Holder in Due Course, Provisions of Section 37,38 and 39 Regarding Liability, Other Important Provisions of the Negotiable Instrument Act; Holder and Holder in Due Course: Holder, Holder in Due Course, Rights and Privileges of a Holder in Due Course, Distinction between Holder and Holder in Due Course; Negotiation and Types of Endorsement: Procedure of Transfer or Modes of negotiation, of Endorsement, The Duration of Negotiability; Dishonour of Negotiable Instrument: Dishonour by Non-acceptance (Section 91), Dishonour by Non-Payment (Section 92); Noting and Protesting: Noting, Protest, Distinction between Noting and Protest, Provision of the Act relating to "Reasonable Time"

The Companies Act, 1956

Marks: 12

Introduction: Characteristic Features of a Company; Important Types: Classification of Companies on The Basis of Liability, on The Basis of Mode of Incorporation, Based on The Basis of Ownership, Based on The Jurisdiction of Functioning, on the basis of Control and/or Share Holding, other types; Prohibition of Associations and Partnerships Exceeding Certain Number; Incorporation of a Company: Important Stages involved in the Process of Formation of a Company, Procedure of Registration of a Company; Memorandum of Association And Article of Association: Definition of Memorandum of Association, Definition of Article of Association, Between Memorandum And Articles; Prospectus: Statement in Lieu of Prospectus, Distinction between a Prospectus and a Statement in Lieu of Prospectus; Share Capital: Classification of Share Capital, Share and Types of Share Capital, Provisions Relating to "Certificate of Shares", Alteration of Share Capital, Increase in Share Capital, Reduction of Share Capital

The Consumer Protection Act, 1986

Marks: 16

Introduction; Need and objectives for Consumer Protection; Extent, Commencement and Application of the Act: Amendments made in the Act in 1991, Amendments Made in the Act in 1993, Amendments of 2002; Definitions: Appropriate Laboratory [Sec2 (1) (a)], Branch Office [Sec2 (1) (aa)], Consumer [Sec2 (1) (d)], A Person [Sec2 (1) (m)], Goods [Sec2 (1) (i)], Service [Sec2 (1) (O)], Spurious Goods and Services [Sec2 (1) (OO)], Trader [Sec2 (1) (q)], Manufacturer [Sec2 (1) (j)], Consumer Dispute [Sec2(1) (e)], Complaint [Sec2 (1) (c) and Complainant [Sec2 (1) (b)], Trade Practice [Sec2 (1) (nn)], Trade Practice [Sec2 (1) (r)], Defect [Sec2(1) (f)], Deficiency [Sec2 (1) (g)], Members [Sec2(1) (jj)]; Six Rights in Consumer Protection Act: Right to Safety, Right to be Informed, Right to Choose, Right to be Heard, Right to seek Redressal, Right to Consumer Protection; Responsibilities of Consumers: Be Quality Conscious, Beware of Misleading Advertisements, Responsibility to Inspect a Variety of Goods before Making Selection, Collect Proof of Transaction, Consumers Must be Aware of Their Rights, Complaint for Genuine Grievances, Proper use of Product/Services; Consumer Protection Council: The Central Consumer Protection Council [Section 4,5,6], The State Consumer Protection Councils, The District Consumer Protection Councils [Section 8-A]; Jurisdiction of Consumer

Courts; Consumer Disputes Redressal Agencies: District Forums, State Commission; Role of Non-Governmental Organisations; Limitations of Consumer Protection Act, 1986

The Information Technology Act, 2000

Marks: 15

Introduction; Objectives of I.T. Act of 2000; Application of the Act; Short Title, Extent, Commencement and Application of the Act [Sec 1]; Definitions of Certain Words, Terms, Concept Used in the Act; Digital Signature: Digital Signature Certificate, Authentication of Electronic Records, authentication of Creation of Digital Signature, Authentication of Verification of Digital Signature; Electronic Governance: Legal Recognitions of Electronic Records, Legal Recognition of Digital Signatures, Electronic Records and Use of Electronic Record and Digital, Signatures in Government and Its Agencies, Retention of Electronic Records, Publication in Electronic Gazette, Protected System, Power of Central Government to Make Rules in respect Of Digital Signature; Attribution, Acknowledgement and Despatch of Electronic Records: Attribution of Electronic Records [Sec11], of Acknowledgement of Receipt [Sec12], Time and place of dispatch and receipt of electronic record [Sec13]; Secure Electronic Records and Secure Digital Signatures: Secure Electronic Record [Sec14], Secure Digital Signature [Sec15], Security Procedures [Sec16]; Regulation of Certifying Authorities: Appointment of the Controller of Certifying Authorities and Other Officers, Functions of the Controller of Certifying Authorities, appointment of Certifying Authorities to Issue Digital Signature, to Issue Digital Signature Certificate; Terms and Conditions of Licence to Issue Digital Signature Certificate; Issuance of Licence, Validity of Licence, Commencement of Operation by Licensed Certifying Authorities, renewal of Licence, Provisions of Sec 24 Relating to the procedure for Grant / Rejection of Licence, revocation of Licence, Suspension of Licence, Notice of Suspension or Revocation of Licence, Surrender of Licence; Powers of Controller of Certifying Authorities; Duties and Responsibilities of Certifying Authority: The Need for a Certification Authority, Duties of Certifying Authorities, Certification Practice Statement, Display of License, Surrender of License, Service Charges; Digital Signature Certificates: Procedure to be Followed by Certifying Authorities to Issue Digital Signature Certificates, ; Duties of Subscribers; Penalties and Adjudication: Penalty for Damage to Computer, Computer System, etc., Penalty for Failure to Furnish Information Return, etc, Residuary Penalty, Power to Adjudicate, Factors to be Taken into Account by the Adjudicating Officer; Offences under I.T. Act; Miscellaneous Provisions of the I.T. Act; Drawbacks of the Act

The Patents Act, 1970

Marks: 12

Introduction: Meaning of “Property’ and ‘Intellectual Property’, Intellectual Property Rights; The Patents Act, 1970: Application of Patent, Grant of Patents and Rights Conferred Thereby; Patents of Addition [Section 54]: Term of Patents of addition [Section 55], Validity of Patents of Addition [Section 56], Advantages of Patents; The Copyright Act, 1957: Meaning of ‘ Copyright’, Works in which Copyright Subsists and Works in which Copyright Does not Subsist[Section 13], Ownership of Copyright and the Rights of the Owner [Section 17], Term of Copyright, Registration of Copyright, Other Provisions of the Copyright Act of 1957, Nature and Features of Copyright Act, Difference Between Patent and Copyright Act; The Design Act, 2000: Definition and Meaning, Nature and Feature of Design, Prohibition of Registration of certain Designs under the Act, Registration of Design, Powers and Functions of Controller; The Trade Mark Act, 1999: Meaning of ‘Trade Mark’, Some important Aspects of the Trade Marks Act of 1999

Reference Books:

1. Balachandran, V. and Thothadri, S., 2009. *Business Law*, 2nd ed., Tata McGraw Hill.
2. Bose, D. C., 2010. *Business Law* , Publication PHI Learning Private Ltd.
3. Dr. Sharma, A.,2010. *Company Law and Secretarial Practice.*, 11th ed., VK Enterprises.
4. Gulshan, S. S., and Kapoor, G. K. *Business and Corporate Laws* 2nd ed., New Age International Publishers.
5. Jain Shail., 2010. *Patents: Procedures and Practices*, Universal Law Publishing.
6. Mathur, S. B., 1974. *Business Law*, Published by Tata McGraw Hill.
7. Moshal B., 2008. *Business & Industrial Law*. Ane Books Pvt. Ltd.
8. Nair., R.2003. *Information technology for participatory development*, Centre for Informatics Research and Development Concept Publishing Company.

0203100: PRODUCTION PLANNING AND CONTROL

Full marks: 100

Production Planning and Control

Marks: 10

Introduction; Production Management and Production Planning; Impact of Industrial Revolution on Production Process; Objectives; Functions; Procedures; Factors Affecting; Role of the Human Relations Movement in Production; Role of Computer and Advances in Production Technology

Objectives, Scope, and Importance of Production Planning and Control

Marks: 13

Introduction; Objective; Scope; Importance; Limitations; Features: Production Planning, Production Control; Comparing Production Planning and Production Control; Establishing a Production Planning and Control Department (PPC): Status of PPC in the Company, Extend of Centralisation, The Appropriate Internal Structure

Methods of Production

Marks: 10

Introduction; Classification of Production Methods; Intermittent Production: Project Production, Job Production, Batch Production; Continuous Production: Mass or Flow Production, Process Production; Factors Affecting Selection Production Process

Plant Layout

Marks: 7

Introduction: Objectives; Principles; Advantages; Factors Affecting; Types: Process Layout, Product or Line Processing Layout, Fixed or Stationary Layout, Cellular Manufacturing Layout, Combined or Hybrid Layout

Materials Requirements Planning

Marks: 12

Introduction; Definition; System Components; Demand Dependency; Objectives; Advantages; Limitations; Evaluation; Keeping MRP Current in a Changing Environment; Manufacturing Resource Planning (MRP II); JIT; KANBAN

The Production Order

Marks: 8

Introduction; Objectives and Functions; Guidelines for preparing Work Orders; Tools of Production Order: Process Analysis Charts, Charts for Analysis of Equipment Utilisation, Master Scheduling

Production Scheduling and Loading

Marks: 7

Introduction; Objectives and Scope of Scheduling; Types of Scheduling; Techniques of Scheduling: Gantt Charts, Johnson's Two Machine Algorithm, Index Method, CPM and PERT Techniques, The Run out Approach

Types of Maintenance Management

Marks: 10

Introduction; Breakdown or Corrective Maintenance Management; Preventive Maintenance; Routine Maintenance; Predictive Maintenance; Planned Maintenance; Total Productive Maintenance (TPM)

Inspection & Quality Control

Marks: 13

Introduction; Inspection: Inspection Vs. Quality Control, Objectives, Steps in the Process, Functions, Problems; Types: Centralised or Crib Inspection, Decentralised or Floor Inspection; Quality Control: Objectives of Quality Control,

Advantages or Importance of Quality Control; Statistical Quality Control (SQC): Advantages of SQC; Control Chart: Types of Control Chart

Work Measurement & its Techniques

Marks: 12

Introduction; Objectives of Work Measurement; Elements; Types of Elements; Benefits; Techniques of Work Measurement: Time Study, The Synthesis Method, Predetermined Motion Time Systems (PMTS), Analytical Estimating, Work Sampling

Reference Books:

1. Fundamentals of Production Planning and Control. Stephen N. Chapman (Paperback - Mar 11, 2005) Publisher: Prentice Hall (March 11, 2005). 288 pages.
2. George Plossl, (1994). Orlicky's Material Requirements Planning. McGraw-Hill Publications. 2nd edition. 311 pages.
3. Gregory T. Haugan, (2001). Project Planning and Scheduling. Management Concepts. 120 pages.
4. Handbook of Cellular Manufacturing Systems. Shahrukh A. Irani. Wiley-Interscience; 1st edition (April 15, 1999). 672 pages.
5. Harold Kerzner, (2005). Project Management: A Systems Approach to Planning, Scheduling, and Controlling. John Wiley and Sons. 9th edition. 1040 pages.
6. Verghese B.V., Kumar, N. Production Management, Anmol Publications Pvt. Ltd. 396 pages

0203377: TOTAL QUALITY MANAGEMENT

Full Marks: 100

Introduction to Quality Systems

Marks: 18

Introduction; Importance of Quality; Levels; Quality and Financial Performance; History; Quality Costs- Types and Categories: Nature of Costs; Quality Control: Objectives, Benefits, Quality Control and Inspection; Quality and Competitive Advantage: Use of Information for Competitive Advantage, Competitive Advantage, Role of Information in Competitive Environment, Porter – Miller Postulates, Changes in Industry Structures, Spawning of New Business, Functional Uses, Strategic Uses; Total Quality Management (TQM): The Importance of Customer-Supplier Relationships- Quality Chains, Main Principles of TQM, Introducing TQM into a Business; Taguchi Loss Function

Statistical Process Control

Marks: 17

Introduction; Chart Basics: Variable Control Charts, XBAR/S Chart vs. XBAR/R Chart, S Charts (Standard Deviations), R Chart (Ranges), I Chart (Individuals), Attribute Control Charts, P Chart vs. NP Chart, P Chart (Proportion Defective - %), NP Charts (Number Defective – n), C Charts, U Chart; Extraction of Information; Capability Index; Individual – X and Moving Range Charts; An SPM/TQM Implementation Model; The Seven Basic Tools of Quality: Flowcharts, Check Sheets, Histograms, Pareto Analysis, Cause and Effect Diagram, Scatter Diagram, Control Charts

Problem Solving Techniques for Quality Management

Marks: 15

Introduction; Six Sigma Overview: The Six Sigma Methodology, Strategies for Six Sigma Introduction; Pareto Analysis; Failure Modes and Effects Analysis (FMEA): Types of FMEAs, FMEA usage, Benefits of FMEA, FMEA Timing, FMEA Procedure, Reliability, Stages of FMEA, Other Types of FMEA; Brainstorming: Usage Of Brainstorming, The Steps In Brainstorming Process, Basic Principles Of Brainstorming; The Deming Cycle, Juran's Improvement Program

Strategic Quality Management

Marks: 15

Total Quality Management (TQM): History, Basic Concept, Structure, Key Facets of TQM Integrative Focus are the PIs, Principles of TQM; Total Company Involvement; Technical and Managerial TQM: Implementation of TQM, Quality Council, Quality Statements, Strategic Planning, Annual Quality Improvement Program, Barriers to TQM Implementation; Philosophies of TQM

Reliability

Marks: 17

Definition: Evolution of the Field of Reliability, Reliability Measurement, Reliability Planning, Factors affecting Reliability; Product Life Characteristic Curve; Reliability Function: Scope of Reliability, Objectives of Reliability, The Strategic Importance of Maintenance and Reliability; Reliability Engineering: Standardisation, Redundancy, Physics of Failure, De-rating Practice, Reliability Testing, Burn-in, Failure Mode and Effect Analysis, Fault Tree Analysis (FTA); Types of Reliability: Inter-Rater or Inter-Observer Reliability, Parallel-Forms Reliability, Internal Consistency Reliability; Comparison of Reliability Estimators

Health and Safety

Marks: 18

Introduction; Theory and Hypotheses: ISO 9001 and Changes in Plant Scale, ISO 9001 and Wages, ISO 9001 and Occupational Health and Safety; Classification of Hazards- ISO 9000: Hazards Analysis, Critical Control Points and Control Measures Hazard Analysis, Classification of Hazard According to the Risk and Severity (Hazard Index), Assessment of Risk In Hazard Analysis; Key Elements of Successful Health and Safety Management: Policy and Commitment, Planning, Implementation and Operation, Measuring Performance, Auditing and Reviewing Performance; Codes of Practice: Regulations, How Regulations Apply, What Form Do they Take?, The Relationship between the Regulator and Industry, What Next?; The Statement of Health and Safety Policy: Basic Objectives and General Content of Statement, Organisation (People and their Duties), Arrangements (Systems and Procedures)

Reference Books:

1. Gulati, R. and Smith, R., 2009. *Maintenance and Reliability Best Practices*, 1st ed., Industrial Press, Inc.
2. Hartman, M. G., 2001. *Fundamental Concepts of Quality Improvement*, ASQ Quality Press.
3. Hutchison, D., 1997. *Safety Health and Environmental Quality Systems Management: Strategies for Cost-Effective Regulatory Compliance*, Lanchester Press Inc.
4. Ireland, L.R., 2007. *Quality Management for Projects and Programs*, Project Management Institute.
5. Leemis, L. M., 2009. *Reliability: Probabilistic Models and Statistical Methods*, Lawrence Leemis.
6. George, S. & Weimerskirch, A., 1998. *Total Quality Management: Strategies and Techniques Proven at Today's Most Successful Companies*, 2nd ed., Wiley.

0203060: ENTREPRENEURSHIP

Full Marks: 100

Basics of Entrepreneurship

Marks: 9

Introduction; The Entrepreneur; Evolution: Entrepreneurial Traits; Entrepreneurship and Intrapreneurship: Entrepreneurship, Intrapreneurship; Entrepreneurial Culture: Elements of Entrepreneurial Culture, The Building Blocks of Entrepreneurial Culture; Comparison of Traditional Manager, Intrapreneurs and Entrepreneurs; Role of Entrepreneurship in India

Entrepreneurial Development Process

Marks: 10

Introduction; The Entrepreneurial Environment; Entrepreneurial Decisions; Types of Enterprises; Problems in Small Scale Enterprise; The Entrepreneurial Process; Entrepreneurial Process Models: The Four Stage Growth Model, The Corporate Development Process Model; Key Success Factors for Entrepreneurs; Characteristics of Successful Entrepreneurs; Functions of Entrepreneurs

The Business Planning Process

Marks: 9

Introduction; Principles for Business Planning; Common Elements in a Business Plan Executive Summary; Defining a Business Idea; Identifying Problems and Opportunities; Purpose of Business Plan: Purpose of Planning; Environmental Analysis: Environment Search, Types of Environment, Environmental Scanning; Entrepreneurship Development Cycle; Business Incubators

Project Management

Marks: 7

Introduction; Entrepreneur as a Project Manager; Feasibility Study; Setting up a Project: Project Selection, Technology and Machinery: Process selection, Financial Assistance for Small Scale Industries, Unit Development; Risk Management; Management of Cash; Management of Inventory

Marketing Function and Strategies

Marks: 9

Introduction; Definition of Marketing; Marketing Concepts; The Marketing Mix: The Product, Price, Place, Promotion; Market Research: Secondary Research, Primary Research; Market Segmentation; Marketing Strategy; Marketing Plan: Review Mechanism, Use of Marketing Plans; Marketing Budget; E-marketing: E-marketing Techniques

Sources of Finance

Marks: 15

Introduction; Financial Decisions to Make Before Starting a Business; Stages of Entrepreneurial Financing; Equipment Leasing or Equipment Financing; Inventory Financing; Factoring Accounts Receivables; Bank Finance through Commercial Banks and Financial Institutions: Fund Based Bank Facilities, Non-fund Based Bank Facilities; Schemes offered by Various Banks and Financial Institutions: Industrial Development Bank of India (IDBI), State Bank of India (SBI), Industrial Credit and Investment Corporation of India (ICICI), Small Industries Development Bank of India (SIDBI), State Financial Corporation (SFC), The Maharashtra State Financial Corporation (MSFC), National Bank for Agriculture and Rural Development (NABARD), Other Banks offering Financial Assistance; Venture Capital Funding (VCF): Characteristics of Venture Capital Funding, Advantages of Venture Capital, The Venture Capital Investment Process, Role of Venture Capital Investor

Human Resource Aspects

Marks: 7

Introduction; Human Resource Planning; Formation of Entrepreneurial Team; The Recruitment Process; Training the Employees; Employee Motivation

The Legal Procedure for Setting up an Enterprise

Marks: 10

Introduction; Type of Business Ownership; Registration of SSI Units; Permissions and Clearances: Regulatory or Taxation Clearances, Environment and Pollution Related Clearances, Product Specific Clearances, Labour Laws; Legal Acts Governing an Enterprise: Factories Act, 1948, The Payment of Wages Act, 1936, The Workmen's Compensation Act, 1923, The Industrial Employment Act, 1946, The Employees State Insurance Act, 1948

Role of Government in Entrepreneurial Development

Marks: 14

Introduction; Incentives: importance; Various Incentives given by the Government of India to Small Scale Entrepreneurs; Incentives given to Export Oriented Units; Incentive Schemes by Maharashtra State Government; Agencies Promoting Entrepreneurship Development in India: Entrepreneurship Development Institute of India (EDII), National Small Industries Corporation Ltd. (NSIC), National Entrepreneurship Development Board (NEDB), Small Industries Service Institute (SISI), National Institute of Entrepreneurship and Small Business Development (NIESBUD), District Industries Centre (DIC), Prime Minister's Rozgar Yojana (PMRY) for Educated, Unemployed Youth

Women Entrepreneurship

Marks: 10

Introduction; Definition; Factors Supporting; Characteristics; Barriers: Overcoming the Barriers; Promoting Women's Enterprises: Government's Role in Promoting Women's Enterprises, Supportive Measures for Women's Economic Activities and Entrepreneurship; NGOs Supporting Women Entrepreneurs: Self-employed Women's Association (SEWA), Association of Women Entrepreneurs of Karnataka (AWAKE), Area Networking and Development Initiatives (ANANDI), Private Sector Organisations; Leading Indian Women Entrepreneurs

Reference Books:

1. Lal, A. K., Clement R. W., 2005. Economic Development in India: The Role of Individual Enterprise, *Asia-Pacific Development Journal*.
2. Nelson R., 2001. *E-marketing: The Way Forward*, SMPS" Marketer" Magazine.
3. Oxlade, L., Brend, M., 2003. *Exploring the Training Process*. Healthlink Worldwide Newsletters.
4. Singh, B., 2009. *Entrepreneurship Development*. Wisdom Publications.
5. Tichapondwa S. M., Tichapondwa, S. P. *Successful Project Management*, Bostwana College of Distance Learning.
6. Villarosa, C., Villarosa, A., 2009. *Down to Business: The First 10 Steps to Entrepreneurship for Women*. Avery Trade.
7. Chatrapathy, M. M., 2007 *Basics of Business and Entrepreneurship*. Asian Centre for Entrepreneurial Initiatives.
8. Hisrich, R., Peters, M., Shepherd, D., 2006. *Entrepreneurship*. McGraw-Hill/Irwin. 7th ed.

0203341: PURCHASE AND MATERIAL MANAGEMENT

Full Marks: 100

Material Management

Marks: 12

Introduction; Classification of Inventory; Meaning; Objectives; Motives; Scope; Material Planning; Technique of Planning Materials; Process of Codification; Standardisation; Scheduling; Procurement; Purchasing; Inspection; Quality Control; Packaging; Storage; Inventory Control; Distribution; Disposal; Functions of Material Manager; Effects of Over Stocking and Under Stocking

Material Cost Management

Marks: 11

Introduction; Material Cost; Economic Order Quantity (EOQ) Models; Determination of Various Inventory Levels: Maximum Level, Minimum Level, Re-order Level, Danger Level, Calculation of Various Levels; ABC Analysis; XYZ Analysis

Material Requirements Planning

Marks: 11

Introduction; Definition; System Components; Demand Dependency; Objectives; Advantages; Limitations; Evaluation; Keeping MRP Current in a Changing Environment; Manufacturing Resource Planning (MRP II); JIT; KANBAN

Introduction to Enterprise Resource Planning (ERP)

Marks: 8

Introduction; History and Evolution; Meaning; Definition; Concept; Implementation of an ERP System; Advantages; Disadvantages; Applicability; Reasons for the Growth of the ERP Market; Success of the ERP

Inventory Models

Marks: 12

Introduction; Models for Accepting/Rejecting Discounts on Purchases, Fixed Order vs. Fixed Interval System: Cyclical Ordering or Fixed Period System (Time Based); Material Requirement Planning (MRP): Applicability of the MRP System, Inputs for MRP, MRP Process, Outputs of MRP, Benefits of MRP; Inventory Turnover: Interpretation of Inventory Turnover

Purchase Management

Marks: 16

Introduction: Objectives of Material Management; Functions: Purchasing Function vs. Purchase Department, Procurement vs. Purchasing, Objectives of Purchasing; Purchase Requisition: Types of Purchase Requisitions; Purchase Procedure; Types of Purchasing: Forward Buying, Tender Buying, Systems Contract, Speculative Buying, Rate Contracts, Reciprocity in Buying, Zero Stock Buying, Blanket Orders; Vendor Management; Inspection of Materials: Pre Dispatch Inspection, Stage Inspection/Final Inspection, Document Inspection, Stores/Receipt Inspection, Third Party Inspection

Stores Management

Marks: 16

Introduction: Motive to Hold Inventory; Functions of Stores Department: Receipt of Material, Issue of Material, Return of Material, Transfer of Materials, Proper Storage Function; Valuation of Material; Valuation of Receipts; Valuation of Issues: First In First Out (FIFO) Method, Last In First out (LIFO) Method, Highest In First Out (HIFO) Method, Average Rate Method, Simple Average (SAR) Method, Weighted Average Rate (WAR) Method, Market Rate; Valuation of Returns

Quality Management

Marks: 14

Introduction; Definition of Total Quality Management: Defining Quality; Cost of Quality; Continuous Improvement (Kaizen): Plan to Study Cycle, Benchmarking; Employee Empowerment: Team Approach; Tools of Quality Control: Cause-and-Effect Diagrams, Flowcharts, Checklists, Control Charts, Scatter Diagrams, Pareto Analysis, Histograms; Process Management; Quality Standards: 8.8.1 ISO 9000 Standards, ISO 14000 Standards; Reason for TQM Failure

Reference Books:

1. Gaither, N., Fraizer, G., 2002. *Operations Management-Overview*, Thompson Learning, 9th ed.
2. Ghosh, S. & Gagnon, R., 1989. *A Comprehensive Literature Review and Analysis of the Design, Balancing and Scheduling of Assembly Systems*, International Journal of Production Research.
3. Goetsch, D. L. & Stanley, D., 1995. *Implementing Total Quality, Upper Saddle River*, N. J: Prentice-Hall.
4. Hall, R., 1977. *Attaining Manufacturing Excellence*, Burr Ridge III: Down-Jones Irwin.
5. Khanna, *Production And Operations Management*, PHI Learning Pvt. Ltd.
6. Kitazawa, S. & Sarkis, J., *The Relationship Between ISO 14001 and Continuous Source Reduction Programs*, International.
7. Kolli, S., *Essentials of Production and Operations Management*, Research and entertainment Association.
8. Krajewski, L. and Ritma, L., *Operations Management, Processes and Value chains*, 7th ed., India: Prentice Hall.