Syllabus	:	<u>Syllabus</u> Manageme	for nt/Admi	Post nistration	Graduate	Diploma	in	Business

A. Principles and Practices of Management and Organizational Behavior

Principles and Practices of Management

- 1. Basic Concepts of Management : Definition, Need and scope .Different schools of management Behavioural , Scientific , Systems , Contingency
- 2. Management theories F.W. Taylor Henry Fayol Elton Mayo
- 3. Managerial skills and functions Levels of management
- 4. Functions of management
 - Planning Def., Nature, Importance, steps, limitations, MBO
 - Organising Def., Nature, Importance, principles, centralization de centralization Org. structures –Z Line & staff, functional, product, matrix, geographical, customer, virtual, boundary less
 - Leading Nature and scope
 - Staffing Def. , Nature , Importance , steps
 - Decision making Def. , Nature , Importance , steps
 - Controlling Def. , Nature , Importance , steps-Z Techniques

Organisational Behaviour

- 1. OB Defn. , Scope , Importance , Concepts of OB , Models of OB Autocratic Collegial , Custodial Supportive , SOBC
- 2. Motivation Defn. Importance
 - Motive Characteristics; Types primary & secondary
 - > Theories of motivation Mc Gregor , A.H. Maslow, Herzberg
 - Overview of moral short note
- 3. Group , Group Dynamics and team building
 - Theories of group formation
 - Formal and informal groups
 - Importance of team building
- 4. Conflict Definition , traditional Vs Modern view of conflict; Types of conflict intra personnel , interpersonal , organizational; Constructive and destructive conflict; Conflict management
- 5. Stress management defn. , causes , types Management of stress
- 6. Leadership defn. , importance , qualities of leaders types of leadership autocratic , democratic , free rein
- 7. Personality : Development of personality; Attributes of personality; Ego state , transactional analysis , Johari window

8. Change management – overview – short note

B. Management Accounting

- 1. Basic Concepts of accounting transactions, principles, types of accounts, journal, ledger, trial balance, final accounts (Emphasis on Clarification of account P & L account, B/S)
- 2. Introduction to requirement of Schedule VI
- 3. Cost Accounting-Relationship with Financial Accounting-Elements of Cost-Preparation of Cost Sheet.
- 4. Materials Cost-Materials Purchasing, receiving, storing, issuing including pricing of issues.
- 5. Labour Cost-Time Keeping and Time Booking-Idle Time-Labour Turnover.
- 6. Overheads-Identifying the overheads with the cost center-Allocation, Apportionment and Absorption-Under Absorption and Over Absorption of Overheads.
- Elementary Study of the Managerial Decision Making Techniques like: (a) Marginal Costing-Break Even Analysis, Applications of Marginal Costing in decision making-Key Factor Considerations. (b) Budgetary Control-Functional Budgets-Flexible Budgets. (c) Standard Costing-Materials Cost and Labour Cost Variances only.
- 8. Introduction to computerized accounting

C. MANAGERIAL ECONOMICS

- 1. Definition, Nature and Scope of Managerial Economics, Managerial Economics and Microeconomics and macroeconomics. Managerial Economics and decision-making. Uses and Significance of Managerial Economics.
- 2. Meaning and Determinants of Demand. Demand Function, Law of Demand Market Demand, Elasticity of Demand, Types and Measurement of Elasticity, Demand Forecasting. Meaning, Significance and Methods of Demand Forecasting.
- 3. Production Function. Law of Variable Proportions. Law of Supply. Elasticity of Supply. Measurement of Elasticity of Supply.
- 4. Costs of Production. Short run and long run costs. Economies of Scale. Cost estimation and cost forecasting. Breakeven analysis.
- 5. Pricing Under Various Market Forms; Perfect competition, Monopoly Monopolistic Competition. Oligopoly. Price Discrimination.
- 6. Pricing Strategies and Methods. Cost plus Pricing. Marginal cost Pricing. Price Leadership. Transfer Pricing. Seasonal Pricing Seasonal Pricing. Cyclical Pricing.
- 7. Need For Government Intervention in Markets. Price Support. Price Controls. Prevention and Control of Monopolies. System of Dual Prices.

D. PRINCIPLES OF MARKETING

- Introduction to Marketing: Definition & Functions of Marketing. Core concepts of marketing a) Need, Want, Desire, Benefits, Demand, Value, Exchange, b) Goods – Services Continuum, Product, Market c) Customer Satisfaction, Customer Delight. d) Approaches to Marketing – Product – Production - Sales – Marketing – Societal – Relational. Concept of Marketing Myopia. Selling versus marketing. e) Holistic Marketing Orientation & Customer Value
- **2.** Consumer Behaviour: Concept, Characteristics of consumer and organizational markets, 5 step Buyer decision process.

- Marketing Environment: Analyzing needs and trends Macro Environment Political, Economic, Socio-cultural and Technical Environment – PEST analysis. Micro Environment – Industry & Competition. Concept of Market Potential & Market Share
- 4. Market segmentation: Definition, Need & Benefits. Bases for market segmentation of consumer goods, industrial goods and services. Segment, Niche & Local Marketing, Effective segmentation criteria, Evaluating & Selecting Target Markets, Concept of Target Market and Concept of positioning Value Proposition & USP.
- **5.** Marketing Mix: Definition of each of the Four P's. Components of each P. Extended 7Ps for services. Significance in the competitive environment.
- **6.** Marketing Planning: Contents of a Marketing Plan Developing a Marketing Plan for variety of goods and services.
- **7.** Marketing organization: Concept, Types Functional organization, Product management organization, Geographic Organization, Customer Based Organization, Matrix organization.
- **8.** Market Evaluation and Controls: Generic Process of Need and Significance of marketing control. Marketing Audit.

E. MARKETING MANAGEMENT

- **1.** PRODUCT: Product Meaning, Goods & Services, Product Mix, Levels of Product, Product Life Cycle Managing the product in Product Life Cycle.
- NEW PRODUCT DEVELOPMENT- Types of new products Test Marketing a new product Portfolio analysis, Branding - Definition, Purpose and Significance, Branding decisions -Packaging & Labeling - Purpose, Types and new trends in packaging.
- **3.** PRICE: Meaning, Importance, Pricing objectives, Factors influencing pricing decisions Approaches to pricing Price & Non-price competition, Setting the price and managing the price changes.
- PLACE: Importance, functions of distribution channels Introduction to the various channels of distribution Designing marketing channels Introduction to Wholesaling, Retailing, Franchising, Direct Marketing, Impact of technology & Internet on distribution.
- **5.** PROMOTION: Concept and role in marketing, Promotional Mix Advertising, Sales Promotion, Personal Selling, Public Relations. Impact of technology & Internet on Promotion
- 6. Extended P's of Marketing People, Process & Physical Evidence

F. FINANCIAL MANAGEMENT

- Finance function Scope and Significance Role of a finance executive Various Forms of Business Organizations
- **2.** Analysis and interpretation of Financial Statements using the techniques of Ratio Analysis and Funds Flow Analysis, DU-PONT Analysis
- Capital Budgeting Nature and Significance Time Value of Money Discounting and Compounding – Methods for evaluating capital expenditure proposals, Computation of Cost of Capital
- 4. Working Capital Management Nature of working capital Need for working capital Estimation of working capital requirement – Financing working capital requirement – Commercial Papers – Management of Cash and Receivables – Factoring
- **5.** Capitalization Under Capitalization and Over Capitalization –Trading on Equity Leverages

- 6. Raising the Long Term and Medium Term funds Own Vs. Borrowed Funds Public Deposits Leasing and Hire Purchase ADR , GDR Capital Structure Credit Rating
- **7.** Management of Profits Dividend Policy Procedural and Legal formalities involved in the payment of dividend Bonus Shares

G. OPERATIONS MANAGEMENT

- Introduction to Operations Management Nature, Scope, Importance and Functions Evolution from manufacturing to operations management - Evolution of the factory system manufacturing systems –quality – mass customization. Contribution of Henry Ford, Deming, Crossby, Taguchi,
- Types of Industries Variety of Business Integration of Manufacturing & Services Scale of Operations. Methods of Manufacturing - Project / Jobbing, Batch Production, Flow / Continuous Production, Process Production - Characteristics of each method
- Facilities Location & Layout Strategic importance Factors affecting location & layout -Installation of facilities – Single location, multi-location decisions. Principles and Types of Facilities Layout.
- **4.** Importance and Functions of Production Planning & Control. Introduction to PERT / CPM Network Crashing (Numericals expected for PERT/CPM)
- **5.** Maintenance Management Importance and types of maintenance Maintenance Planning Spare Parts Management Concept of TPM.
- Inspection Cent percent Inspection, Sample Inspection, Operation Characteristics Curves, Statistical Quality Control – Construction & Interpretation of Control Charts – (X-R,n,p,c,np) Introduction to Six Sigma, (Numericals expected for Control Charts).
- Productivity Work Study Objectives, Scope and Uses Methods Study Flow process chart, Flow diagram & Process mapping - Work Measurement - Elements - Performance Rating -Allowances - Standard Time - Synthetic Time Standards - Work Sampling (Numericals expected for Standard Time)
- 8. Lean Production Systems TOYOTA system JIT KANBAN Theory of Constraints

H. MATERIALS & LOGISTICS MANAGEMENT

- Introduction: Materials Management Evolution, Importance, Scope and Objectives Interface with other functions. Concept of Logistics and Supply Chain Management and evolution to 4PL. Trade off Customer Service & Cost.
- Inventory Need of Inventory Costs associated with Inventory Types of Inventory Basic EOQ Model - EOQ with discounts - ABC Analysis - (Numericals expected on Basic EOQ, EOQ with discounts & ABC)
- 3. Material Requirement Planning Concept of MRP, MRP II, MPS, BOM ERP.
- **4.** Purchasing Management Responsibilities of Purchase Department Purchase Cycle Negotiation & Bargaining Vendor relations Purchasing Methods Global sourcing
- 5. Stores Functions, Importance, Organization of stores & Stores layout. Stores procedure documentation.
- 6. Materials Handling Principles of Materials Handling system Materials Handling Equipments Safety issues
- I. Information Technology

- **1.** Introduction to Computers Hardware Software. System Software, Application Software and Packages. Introduction to Embedded Software.
- 2. Commonly used Software Packages like Microsoft Word Microsoft Excel Microsoft Power Point Microsoft Access Tally etc
- **3.** Introduction to World Wide Web Internet operations Introduction to Electronic Commerce and Electronic Business.

J. Human Resources Management

- **1.** Human resources Management-Introduction and Importance-Evolution –difference between Personnel Management and HRM- Strategic HRM- role of a HR Manager.
- **2.** Human Resources Planning-Objectives-Importance-HRP Process- Manpower Estimation-Job analysis-Job Description-Job Specification. Recruitment-Sources of Recruitment-Selection Process-Placement and Induction-Retention of Employees.
- **3.** Training and Development- Objectives and Needs-Training Process-Methods of Training –Tools and Aids-Evaluation of Training Programs.
- **4.** Career Planning- Succession Planning.
- **5.** Performance Management System-Definition, Concepts and Ethics-Different methods of Performance Appraisal- Rating Errors-Competency management.
- **6.** Compensation Management –Concepts and Components-Job Evaluation-Incentives and Benefits.
- 7. (Productivity Management-Concepts-TQM-Kaizen-Quality Circles
- 8. Industrial relations-Grievance Procedure-collective Bargaining-Settlement of Disputes.
- **9.** Retirement/Separation-Superannuation-Voluntary Retirement Schemes- Resignation, Discharge-Dismissal-Suspension-Layoff.

K. Management Information System

- Management information systems Need, purpose and objectives, contemporary approaches to MIS, Information as strategic resource, use of information for comparative advantages, MIS as a instrument for organizational change
- **2.** Information concepts, types of information, attributes of effective information, Definition of Information technology, IT capabilities and their impact on organization
- **3.** Networks- Types, topologies of network, Concept of IT enabled services and call center.
- 4. DataBase Management Systems- Overview, advantages and Disadvantages, Data Warehousing and Data Mining
- **5.** Systems concept- types of systems, System development life cycles- system development models- waterfall, spiral, prototyping
- Decision making- Process and types of decision making, models of decision making- Classical, Administrative and Herbert Simons model, role of information in decision making, DSS, EIS, Expert Systems
- 9. Information Security and control concepts Access controls, QA and QC concepts with respect to the processes of various functional areas of management, social and ethical issues related to MIS

L. LEGAL ASPECTS OF BUSINESS

- **1.** THE CONTRACT ACT, 1871 : Nature and classification of Contracts ; Offer and Acceptance-Consideration, Capacities of Parties, Free Consent; Provisions relating to discharge of contract, breach of contract and remedies; Contingent Contracts, Quasi-contracts
- CONTRACT ACT, 1872 : Contract of Indemnity Meaning, nature Right of Indemnity Holder and Indemnifier; Contract of Guarantee –Meaning, Nature and Features; Surety and Co-surety – Rights and Liabilities – Discharge of surety from his liability; Agency- Creation of Agency-Ratification of Agency- Duties and Liabilities of Agency and Principal-Termination of Agency.
- SALE OF GOODS ACT,1930 : Contract for Sale of Goods Meaning- Essentials of a Contract of Sale – Formalities of a Contract of Sale; Conditions and Warranties; Rights of Unpaid Seller – Rules as to delivery of goods; Auction sale; Caveat – emptor
- 4. THE NEGOTIABLE INSTRUMENTS ACT -1881 : Negotiable Instruments Meaning, Characteristics, Types [Cheques 15 (Crossing),Promisory Note and Bill of Exchange] – Holder and Holder in Due Course ;Negotiation and Types of Endorsement; Dishonour of Negotiable Instrument & Provisions of section 138 – Noting and Protest; Material alteration
- THE COMPANIES ACT, 1956 : Company-Definition, Meeting, Features and Types of Companies; Incorporation of a company – Memorandum of Association, Articles of Association and Prospectus; Share Capital – Types of Share Capital; Board of Directors; Type of company Meetings
- 6. THE CONSUMER PROTECTION ACT, 1986 : Definition of Consumer, complainant, Goods, Service

 Complaint Unfair Trade Practices Restrictive Trade Practices; Rights and Remedies for consumers; Consumer Protection Council; Consumer Disputes Redressal Agencies
- **7.** THE INFORMATION TECHNOLOGY ACT, 2000 : Digital Signature; Digital Signature Certificate; Electronic Records and Governance; Certifying Authorities; Cyber Crimes; Offences & Penalties under IT Act, 2000.

M. Statistical & Quantitative Techniques

- **1.** Collection of data & it's presentation a. Arranging of the data in tabular form b. Frequency distribution& cumulative frequency distribution c. Graphs, charts & diagrams
- Measures of central tendencies a. Concepts of representatives value of the groupmean,median,mode. b. Positional values quartiles, deciles & percentiles. c. Calculating the above measures for discrete & grouped data.
- **3.** Measures Of Dispersion a. Concept of range ,quartile deviation, mean deviation ,standard deviation. b. Calculations of the measures for discrete & grouped data
- **4.** Simple & Multiple Correlation & Regulation a. Karl Pearson's co efficient of correlation. b. Spearman's rank correlation. c. Linear regression. d. Multiple & partial correlation. e. Multiple regression.
- 5. Decision Theory : criterions of decision making.
- **6.** Game Theory : 2*2, zero sum game with dominance- pure & mixed strategies.

N. RESEARCH METHODOLGY

- **1.** Meaning, objectives and motivation in research types of research research approaches research process validity and reliability in research obstacles in accepting research
- **2.** Problem formulation, Hypothesis Formulation, Types of Hypothesis, Characteristics of Good Hypothesis

- **3.** Meaning & Significance of Research design features of good research design Types of good research design Contents of research design.
- 4. Types and sources of data Primary data collection methods
- **5.** Measurement and scaling Techniques-Errors in Measurement-Tests of Sound measurement-Scaling and scale Construction techniques
- 6. Steps in Questionnaire Design, Characteristics of good questionnaire
- **7.** Census Vs. Sample, Steps in Sample Design, Sampling Methods (Probability and Non Probability), Characteristics of a good sample design
- **8.** Data Analysis and Interpretation, Introduction to Univariate, Bivariate and Multivariate Analysis.
- **9.** Sampling Theory-Sampling Distribution, Confidence Level, Sampling error, Interval Estimation, Determining Size of Sample
- **10.** Testing Hypothesis-Procedure for Testing Hypothesis-Parametric and Non-Parametric Tests.
- 11. Report Writing- Layout of a Research Report, Characteristics of Good Research Report
- 12. Use of Computer in Research-Introduction to software packages used in Data Analysis

O. MANAGEMENT CONTROL SYSTEMS

- Characteristics of Management Control System Evolution of control systems in an organization – Relating the system to organizational objectives - Strategic Planning, Management Control and Operational Control – Goal Congruence – Functions of the Controller – Concept of Management Audit as a control tool
- Responsibility Centers Types of Responsibility Centers Expense Centers, Profit Centers and Investment Centers – Budgetary Control as a tool for Management Control Systems -Engineered, Discretionary and Committed Costs – Approaches to budgeting w.r.t. Engineered and Discretionary costs
- Concept of Transfer Pricing (Market based and Cost Based) Return on Investment, Economic Value Added as a tool to management performance measurement – Introduction to Activity Based Costing
- 4. Management Control Systems in Service Sector vis-à-vis in Manufacturing Sector
- 5. Financial and Non-financial performance measures w.r.t. Balance Score Card

P. INTEGRATED MARKETING COMMUNICATIONS

- Concept and Process of Integrated Marketing Communications (IMC): Elements of IMCa) Advertising – Classification of advertising, types, advertising appropriation, advertising campaigns b) Sales Promotion – Different types of Sales Promotion, relationship between Sales promotion and advertising c) Publicity – Types of Publicity, relationship between advertising and publicity d) Personal Selling e) Direct marketing and direct response methods f) Event Management g) E-Commerce h) Corporate Communication i) Public Relations – Types of PR j) Media relations k) Community relations I) Industrial relations and m) Government relations n) Employee relations (House Journals / Newsletter) o) Crisis Management p) Trade Fairs and Exhibitions
- 2. IMC Message Design: AIDA model Considerations for creative idea visualization
- 3. Media Management Media Process Media Jargons Media Buying Strategies and execution
- **4.** Suppliers in IMC: Hoarding Contractors/Printers etc., Ad. Agency Departments of Ad. Agency, Client Servicing-client Agency relationship, account planning

- 5. Ethics and social responsibility in IMC campaigns.
- 6. Evaluating Marketing Communication Programmes

Q. INVENTORY MANAGEMENT & MATERIAL REQUIREMENTS PLANNING

- **1.** Inventory Management: Inventory concept; need for inventory; types of inventory, functions, use; Dependent and Independent Demand
- **2.** Strategic Inventory Management: Objectives and Importance of the inventory management function in reference to Profitability, Strategy, customer satisfaction and Competitive Advantage.
- **3.** Inventory Control Techniques: Inventory classification and its use in controlling inventory, Setup time and inventory control, safety stock determination considering service level. Strategies to increase Inventory Turns, Reduce throughput time, Reduce WIP, eliminate waste, and reduce inventory level in service and manufacturing organizations.
- **4.** Inventory Models: Inventory models Fixed Order Versus Fixed Interval systems Developing Special Quantity Discount Models Inventory Model for Manufactured Items Economic Lot Size when Stock Replenishment is instantaneous.
- Material Requirement Planning Systems (MRP): Meaning, purpose and advantage of MRP, Data Requirements and Management –Bill of Materials, Master Production Schedules, process of MRP, output of MRP.
- **6.** Make Or Buy Decisions: Concept of outsourcing, Factors influencing Make Or Buy Decisions, Trends in Make Or Buy Decisions in context of core competency.
- **7.** Materials Management In JIT Environment: Zero inventory concept, Excess Inventory: A Roadblock to World-Class Manufacturing, Materials management in JIT environment, Vendor Managed Inventory, vendor relationship in JIT context.
- **8.** Performance: Evaluation of Performance Of Materials Function Criteria and methodology of evaluation.

R. Labour Laws

- The Factories Act, 1948 Approval, Licensing and Registration Inspecting Staff Health Welfare - Working Hours - Annual Leave with wages - Periodical Returns- Registers and Records
- 2. The Bombay Shops and Establishments Act, 1948 Registration of Establishments Shops and Commercial Establishments Residential Hotels, Restaurants and Eating Houses Theatres or other places of Public Amusement or Entertainment Leave with pay and payment of wages Health and Safety Maintenance of Registers, Records and Annual Report
- The Contract Labour (Regulation and Abolition) Act, 1970 Advisory Boards Registration of Establishments – Licensing of Contractors – Welfare and Health of Contract Labour – Registers and other Records to be maintained.
- The Industrial Disputes Act, 1947 Definitions of Industry, Workman and Industrial Dispute -Authorities under the Act – Procedure, Powers and Duties of Authorities – Strikes and Lock outs – Lay off and Retrenchment – Special Provisions relating to Layoff, Retrenchment and Closure in certain establishments
- The Maharashtra Recognition of Trade Unions & Prevention of Unfair Labour Practices Act, 1971 Entire Act
- 6. The Industrial Employment (Standing Orders) Act, 1946 Entire Act Principles of Natural Justice

S. SUPPLY CHAIN & LOGISTICS MANAGEMENT

- **1.** TWENTY FIRST CENTURY SUPPLY CHAINS : The Supply Chain Revolution Generalized Supply Chain Model Supply chain and networks
- **2.** LOGISTICS: The Logistics Of Business The Logistical Value Proposition- The Work Of Logistics-Logistical Operating Arrangements - Flexible Structure – Supply Chain Synchronization.
- **3.** CUSTOMER ACCOMMODATION: Customer Focused Marketing Customer ServicesCustomer Satisfaction
- PROCUREMENT AND MANUFACTURING: The Quality Imperative- Procurement Manufacturing-Logistical Interfaces.
- **5.** INFORMATION TECHNOLOGY FRAMEWORK: Information System Functionality Supply Chain Information System Design.
- 6. INVENTORY: Inventory Functionality and Definitions-Inventory Carrying Cost
- **7.** TRANSPORTATION: Transport Functionality, Principles and ParticipantsTransportation Service.
- **8.** WAREHOUSING: Strategic Warehousing-Warehousing Operations-Warehousing Ownership Arrangements- Warehouse Decisions.
- **9.** PACKAGING AND MATERIALS HANDLING: Packaging Perspectives-Packaging For Materials Handling Efficiency-Materials Handling.
- **10.**OPERATIONAL INTEGRATION: Logistical Integration Objectives-Enterprise Integration-Supply Chain Processes- Supply Chain Planning Considerations `
- **11.**GLOBAL STRATEGIC POSITIONING: Global Supply Chain Integration-Supply Chain Security-International Sourcing.
- **12.**NETWORK INTEGRATION : Enterprise Facility Network- Warehouse RequirementsTotal Cost Integration
- **13.**RELATIONSHIP DEVELOPMENT AND MANAGEMENT: Development And Management Of Internal Logistics Relationships-Development And Management Of Supply Chain Relationships.
- **14.**e-COMMERCE AND SCM: E commerce advantages and disadvantages for SCM e-commerce as an enabler.

T. INDUSTRIAL RELATIONS

- **1.** Industrial Relations-meaning, objectives, scope, determinants of industrial relations. effects of social, technological, political and economical factors on industrial relations.
- **2.** Approaches to the study of industrial relations and its impact. Role of judiciary and its impact on industrial relations.
- **3.** Trade union-objectives ,functions and problems of trade union. Role of ILO in trade union movement, trade union and productivity.
- **4.** Industrial Dispute-meaning, types of disputes, causes of industrial disputes.
- **5.** Machineries to solve industrial disputes under Industrial Disputes Act, 1947, role of judiciary and its impact on industrial relations
- **6.** Collective bargaining-concept, characteristics, need and importance, process of collective bargaining.
- **7.** Workers participation in management--- concept, pre-requisites for participation, forms and levels of participation, benefits of participation

- **8.** Impact of globalization on industrial relations, changing role of management, union and government.
- 9. Salient features of Industrial employment standing orders act 1946

U. ECONOMIC ENVIRONMENT OF BUSINESS & ENVIRONMENTAL MANAGEMENT

- 1. Agricultural Sector Implications of WTO Concept & Importance of Commodity market
- 2. Industrial Policy Regulations of 1991 leading to Liberalization, Privatization and Globalization Emergence of BRIC economies
- **3.** Banking Sector Concept & Importance of Core Banking, Retail Banking. Basel II Concept and implications
- 4. Insurance Sector IRDA, Life and Non Life Insurance
- **5.** Taxation Concept Implications of VAT, Customs Procedures, Excise.
- **6.** Capital Market Meaning, Avenue for raising finance. Introduction to derivatives market.
- **7.** Environmental Education Objectives, Principles, Scope and functions of environmental education. Role of NGOs.
- 8. Managing Natural Resources Importance Water, Land.
- **9.** Global Warming Problem, Implications, Concept of Carbon Credit, Role of Government and Non-Government Agencies & Businesses.
- **10.** Disaster management Concept, causes and consequences, disaster mitigation.

Note: The above syllabus is indicative and the questions in the test may include similar other topics pertaining to the level and content of essential qualification.