

# **MBA (SYSTEM MANAGEMENT)**

**E) INSTRUCTIONALDESIGN**  
**MBA SYSTEM MANAGEMENT**

<b>Course Code</b>	<b>Title</b>	<b>CIA Max.</b>	<b>ESE Max.</b>	<b>TOT Max.</b>	<b>C</b>
<b>I Semester</b>					
35811	Management – Principles and Practices	25	75	100	4
35812	Organizational Behaviour	25	75	100	4
35813	Managerial Economics	25	75	100	4
35814	Quantitative Techniques	25	75	100	4
35815	Financial and Management Accounting	25	75	100	4
Total		125	375	500	20
<b>II Semester</b>					
35821	Research Methods	25	75	100	4
35822	Business Environment	25	75	100	4
35823	Business Laws	25	75	100	4
35824	Management Information System	25	75	100	4
35824	Human Resource Management	25	75	100	4
Total		125	375	500	20
<b>III Semester</b>					
35831	Marketing Management	25	75	100	4
35832	Financial Management	25	75	100	4
35833	Office Automation	25	75	100	4
35834	Internet Programming and Web Design	25	75	100	4
35835	Multimedia Applications	25	75	100	4
Total		125	375	500	20
<b>IV Semester</b>					
35841	Management Control Systems	25	75	100	4
35842	Re-engineering and Flexi Systems	25	75	100	4
35843	Relational Database Management Systems	25	75	100	4
35844	Data Mining and Warehousing	25	75	100	4
35845	Software Engineering	25	75	100	4
Total		125	375	500	20
<b>Grand Total</b>				<b>2000</b>	<b>80</b>

## **35811- MANAGEMENT PRINCIPLES AND PRACTICES**

### **Objectives:**

- To introduce the basic concepts of Management functions and principles
- To learn the scientific decision making and modern trend in the management process
- To understand the contemporary practices and issues in management

### **BLOCK I: BASIC CONCEPTS OF MANAGEMENT**

- UNIT 1 Management: Definition – Nature, Scope and Functions – Evolution of Management – Management thought in modern trend – Patterns of the management analysis – Management Vs. Administration - Management and Society: The external Environment, Social Responsibility and Ethics.
- UNIT 2 Management Science and Theories : Contributions of FW Taylor, Henri Fayol, Elton Mayo, Roethlisberger, H.A.Simon and P.F Drucker - Universality of Management - Relevance of management to different types of organization.
- UNIT 3 Planning: Nature and Purpose – Principles and planning premises – Components of planning as Vision, Mission, Objectives, Managing By Objective (MBO) Strategies, Types and Policies -Planning and Decision Making: Planning process.
- UNIT 4 Decision making: Meanings and Types – Decision-making Process under Conditions of Certainty and Uncertainty – Rational Decision Making Strategies, Procedures, Methods, Rules, Projects and Budgets.

### **BLOCK II: RECRUITMENT AND SELECTION**

- UNIT 5 Organizing: Nature, Importance, Principles, purpose and Scope - Organizing functions of management – Classifications of organization – Principles and theories of organization – Effective Organizing – Organizational Culture and Global Organizing.
- UNIT 6 Organizational Structure – Departmentalization – Span of control – Line and staff functions – Formal and Informal Groups in Organizations - Authority and responsibility - Centralization and decentralization – Delegation of authority – Committees – Informal organization.
- UNIT 7 Staffing: General Principles of Staffing- Importance, techniques, Staff authority and Empowerment in the organization – Selection and Recruitment - Orientation - Career Development - Career stages – Training – Performance Appraisal.
- UNIT 8 Creativity and Innovation – Motivation - Meaning – Importance – Human factors of Motivation – Motivation Theories: Maslow, Herzberg, Mc Gregor (X&Y),

Ouchi (Z) ,Vroom, Porter-Lawler, McClelland and Adam – Physiological and psychological aspects of motivation .

### **BLOCK III: FUNCTIONS OF MANAGEMENT**

- UNIT 9 Directing : Meaning, Purpose, and Scope in the organization – Leadership: Meaning, Leadership styles, Leadership theories: Trait, Contingency, Situation, Path-Goal, Tactical, Transactional, Transformational and Grid. Leaders: Type, Nature, Significance and Functions, Barriers, Politics and Ethics. Leader Vs. Manager.
- UNIT 10 Communications: Meaning – Types – Process – Communication in the decision making – Global Leading - Effective communication in the levels of management. – Uses of Communication to Planning, Organizing, coordinating and controlling.
- UNIT 11 Co-ordination: Concept; Meaning, Characteristics, Importance in the organization, Co-ordination process and principles - Techniques of Effective co-ordination in the organization - Understanding and managing the group process.

### **BLOCK IV: BUSINESS ETHICS WITH NEW PERSPECTIVES IN MANAGEMENT**

- UNIT 12 Business ethics: Relevance of values in Management; Holistic approach for managers indecision-making; Ethical Management: Role of organizational culture in ethics – Ethics Committee in the organization.
- UNIT 13 Controlling: Objectives and Process of control Devices of control – Integrated control – Special control techniques- Contemporary - Perspectives in Device of Controls
- UNIT 14 New Perspectives in Management - Strategic alliances – Core competence – Business process reengineering – Total quality management – Six Sigma- Benchmarking- Balanced Score-card.

### **REFERENCES**

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123. **Weihrich and Koontz**,Management: A Global Perspective, McGraw Hill, 1988
124. Peter F. Drucker, Management, 2008.
125. Gene Burton and Manab Thakur, Management Today: Principles and Practice, Tata McGraw Hill.
126. Ricky W. Griffin, Management, South-WesternCollege Publications, 2010
127. Stephen P. Robbins and Mary Coulter, Management, 9th Edition, 2006.
128. Kaplan and Norton, The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment, HBP, 2000.

## **35812 - ORGANIZATIONAL BEHAVIOUR**

### **Objectives:**

- To understand the personality traits and influence on the organization.
- To imbibe the necessary conceptual understanding of behaviour related people
- To learn the modern trends, theories and changes in organizational Behaviour.

### **BLOCK I: BASICS OF ORGANISATIONAL BEHAVIOUR**

- UNIT 1 Organizational Behaviour: History – Meaning Elements – Evolution, Challenges and opportunities – Trends – disciplines – Approaches – Models – Management functions relevance to organizational Behaviour – Global Emergence of OB as a discipline.
- UNIT 2 Personality – Determinants, Structure, Behaviour, Assessment, Individual Behaviour: Personality & Attitudes- Development of personality – Nature and dimensions of attitude – Trait Theory – Organizational fit – Organizational Commitment
- UNIT 3 Emotions – Emotional Intelligence – Implications of Emotional Intelligence on Managers – EI as Managerial tool – EI performance in the organization – Attitudes: Definitions – Meaning – Attitude relationship with behaviour – Types – Consistency
- UNIT 4 Individual Behaviour and process of the organization: Learning, Emotions, Attitudes, Perception, Motivation, Ability, Job satisfaction, Personality, Stress and its Management – Problem solving and Decision making – Interpersonal Communication - Relevance to organizational behaviour.

### **BLOCK II: ORGANISATIONAL SOURCES AND MANAGEMENT**

- UNIT 5 Group Behaviour: Group Dynamics - Theories of Group Formation - Formal and Informal Groups in organization and their interaction - Group norms – Group cohesiveness – Team: Importance and Objectives - Formation of teams – Team Work- Group dynamics – Issues - Their relevance to organizational behaviour.
- UNIT 6 Organizational Power: Organizational Power: Definition, Nature, Characteristics - Types of powers - Sources of Power - Effective use of power – Limitations of Power – Power centre in Organization.
- UNIT 7 Organizational Politics: Definition – Political behaviour in organization - Factors creating political behaviour – Personality and Political Behaviour - Techniques of managing politics in organization – Impact of organizational politics.

- UNIT 8 Organizational Conflict Management: Stress Management: Meaning – Types – Sources and strategies resolve conflict – Consequences – Organizational conflict: Constructive and Destructive conflicts - Conflict Process - Strategies for encouraging constructive conflict - Strategies for resolving destructive conflict.

### **BLOCK III: ORGANISATIONAL CLIMATE AND CULTURE**

- UNIT 9 Organizational Dynamics: Organizational Dynamics – Organizational Efficiency, Effectiveness and Excellence: Meaning and Approaches – Factors affecting the organizational Climate.
- UNIT 10 Organizational Culture: Meaning, significance – Theories – Organizational Climate – Creation, Maintenance and Change of Organizational Culture – Impact of organizational culture on strategies – Issues in Organizational Culture.
- UNIT 11 Inter personal Communication: Essentials, Networks, Communication technologies – Non-Verbal communications Barriers – Strategies to overcome the barriers. Behavioral Communication in organization - Uses to Business

### **BLOCK IV: CHALLENGES AND ORGANISATIONAL DEVELOPMENT**

- UNIT 12 Organizational Change: Meaning, Nature and Causes of organizational change Organizational Change –Importance – Stability Vs Change – Proactive Vs. Reaction change – the change process – Resistance to change – Managing change.
- UNIT 13 Organizational Behaviour responses to Global and Cultural diversity, challenges at international level, Homogeneity and heterogeneity of National cultures, Differences between countries.
- UNIT 14 Organizational Development: Meaning, Nature and scope – Features of OD – OD Interventions- Role of OD – Problems and Process of OD – process OD and Process of Intervention - Challenges to OD- Learning Organizations - Organizational effectiveness Developing Gender sensitive workplace

## REFERENCES

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108. Keith Davis, Organizational Behavior: Human Behavior at Work, McGraw Hill, 2010
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111. K. Aswathappa, Organizational Behaviour, Himalaya Publishing, Mumbai, 2010
112. Judith R. Gordon, A Diagnostic Approach to Organizational Behaviour, Allyn & Bacon, 1993.

## **35813 - MANAGERIAL ECONOMICS**

### **Objectives:**

- To understand the economic principles and its applications in business
- To develop economics based analytic skills for business
- To make the learners to strong in economical approach

### **BLOCK I: BASICS OF MANGERIAL ECONOMICS**

- UNIT 1 Economics: Introduction – Meaning, nature and scope of Managerial Economics – General Foundations of managerial Economics – Economic Approach – Working of Economic system - Circular flow activities - Economics & Business Decisions - Relationship between Economic theory and Managerial Economics.
- UNIT 2 Business Decisions: Role of managerial Economics in Decision making – Decision making under Risk and Uncertainty - Concepts of Opportunity cost, - Production possibility curve – Incremental Concepts - Cardinal and Ordinal approaches to consumer Behaviour Time Value of Money –
- UNIT 3 Consumer Behaviour: Marginalism – Equilibrium and Equi-marginalism and their role in business decision making. – Equi-Marginal principles – Utility analysis – Total and Marginal Utility – Law of diminishing marginal utility – Marshallian approach and Indifference curve analysis.
- UNIT 4 Demand analysis: Meaning, Functions - Determinants of demand-Law of Demand – Demand Estimation and Forecasting - Applications of demand in analysis - Elasticity of Demand: Types, Measures and Role in Business Decisions.

### **BLOCK II: DEMAND AND SUPPLY MANGEMENT**

- UNIT 5 Supply Analysis: Determinants of supply- Elasticity of Supply- Measures and Significance - Derivations of market demand – Demand Estimation and Forecasting- Demand and Supply equilibrium – Giffen Paradox
- UNIT 6 Production Functions: Managerial uses of production function - Cobb-Douglas and other production functions - Isoquants – Short run and long run production function – Theory of production – Empirical estimations of production functions.
- UNIT 7 Forms of Markets: Meaning and Characteristics - Market Equilibrium: Practical Importance, Market Equilibrium and Changes in Market Equilibrium. Pricing Functions: Market Structures - Pricing and output decisions under different competitive conditions: Monopoly Monopolistic completion and Oligopoly



- UNIT 8 Strategic Behaviour of the firms and Game Theory - Nash Equilibrium: Implications – Prisoner's Dilemma: Types of strategy – Price and Non price competition – Relation to the firm behaviour.

### **BLOCK III: COST AND BREAK FROM POINTS**

- UNIT 9 Cost and Return: Cost function and cost output relationship – Economics and Diseconomies of scale - Cost control and cost reduction- Cost Behaviour and Business Decision- Relevant costs for decision-making- Traditional and Modern theory of Cost.
- UNIT 10 New Product Penetrative Decision and Skimming the cream Pricing- Government control over pricing - Concept of Profit- Types and Theories of Profit by Knight (Uncertainty), Schumpeter (Innovation), Clark (Dynamic) and Hawley (Risk) - Profit maximization – Cost volume profit analysis – Risk and Return Relationship.
- UNIT 11 Profit and Investment Analysis: Meaning – Measurement of profit – Theories of Pricing- Profit planning and forecasting- Profit and Wealth maximization – Cost volume profit analysis – Investment analysis and Evaluation: IRR, NPV and APV techniques.

### **BLOCK IV: MACRO ECONOMICS AND REGULATIONS**

- UNIT 12 Macro-economic Factors: Nature, Importance ; Economic Growth and Development - Business cycle – Phases and Business Decision- Inflation - Factors causing Inflation and Deflation - Control measures – Balance of payment Trend and its implications in managerial decision.
- UNIT 13 National Income: Introduction Meaning – Theories – Methods of Measurement - Sectoral and Population distributions – Per capita Income: Definition – Calculations – Uses – Limitations – GDP – GNP - Recent developments in Indian Economy.
- UNIT 14 Economic Regulations of Business: Introduction – Antitrust theory and Regulations – The structure – Conduct – Performance paradigm – Concentration: Overview – Measuring concentration – Regulation of Externalities.

## REFERENCES

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169. Varshney and Maheswari, Managerial Economics, Sultan Chand and Sons.
170. Mehta P L, Managerial Economics, Sultan Chand and Sons.
171. Joel Dean, Managerial Economics, Prentice-Hall.

## **35814- QUANTITATIVE TECHNIQUES**

Objectives:

- To help develop analytical skills based on problem solving approach
- To learn quadrature problems solving of business issues.
- To acquire the knowledge in statistics and their use in business decision making.

### **BLOCK I: BASICS OF QUANTITATIVE TECHNIQUES**

- UNIT 1 Basic Quantitative Concepts: Place of quantitative analysis in the practice of management – Problem definition: Models and their development. Variables notion of Mathematical models – concept of trade off – Notion of constants – concept of Interest.
- UNIT 2 Basic Concept of differentiation – integration – Optimization concepts – use of differentiation for optimization of business problem Optimization Statistics: Meaning and Applications of Statistics in business decision making and research - Collection, Tabulation and presentation of data - Measures of central tendency: Mean, Median and Mode. Measures of dispersion
- UNIT 3 Variables and function: Linear and Non-linear –Graphical representation of functions and their applications in cost and revenue behavior. Slope and its relevance –Use of functional relationships to understand elasticity of demands, Relationship between costs and level of activity, Decisions on Minimizing Costs and Maximizing output/profits.
- UNIT 4 Linear Programming: Introduction to the linear programming – Concepts of optimization- Formulation of different types of linear programming –Standard form of LP problems - Importance and practical implementation in Industry

### **BLOCK II: LINEAR PROGRAMMING PROBLEMS**

- UNIT 5 Simple regression and Correlation analysis: Introduction, Correlation, Correlation analysis, linear regression analysis and Co-efficient. Duality and sensitivity analysis for decision-making- Solving LP using graphical and simplex method (only simple problems) – Interpreting the solution for decision-making

- UNIT 6 Special Algorithms of LPP: Transportation Algorithm - Balanced and Unbalanced Problem Formulation and solving methods: North West Corner, Vogel's Approximation-MODI method- Assignment and Travelling Executive Algorithms
- UNIT 7 Theory of Probability: Introduction to the Concept – Development of probability – Areas and Utilisation of probability theories in the Business – Sample space – terminology – Types of probability.
- UNIT 8 Theoretical Probability Distributions: Introduction - Concept of events – Probability of events – Joint, conditional and marginal probabilities Probability distributions: Binomial, Poisson and Normal – Features and Applications – Use of Normal Tables.

### **BLOCK III: OPERATIONAL RESEARCH AND SIMULATION TECHNIQUES**

- UNIT 9 Operational research for Decision Making: Historical background and Developments – Definition – Phases in the use of Operations research – Models – Characteristics of quantitative methods - Benefits and Limitations of Quantitative methods.
- UNIT 10 Sequencing /Scheduling Methods : Concepts – terminology – Notations – Assumption for scheduling models – Job sequencing priorities – Processing the job and Mass production system.
- UNIT 11 Simulation Techniques: Introduction to simulation as an aid to decision-making- Advantages and Disadvantages of Simulation – Applications of simulations models – Types: Inventory, Cash, and Project – Random Numbers.

### **BLOCK IV: QUERY AND DECISION TREE ANALYSIS**

- UNIT 12 Queuing Theory: Introduction – Definition – Queue priorities Product launching problems using Monte Carlo simulation- Queuing Theory: M/M/1 queuing model and applications.

UNIT 13 Decision Analysis: Concepts – Definition – Decision Tables Pay-off and Loss tables – Expected value of pay-off – Expected value of Perfect Formation – decision making process

UNIT 14 Decision Tree Analysis: Decision making environments – Concept of Posterior probabilities Decision Tree approach to choose optimal course of action Criteria for decision – Mini-max, Maxi-max, Minimizing Maximal Regret and their applications.

## REFERENCES

161. David R. Anderson, et al, An Introduction to Management Science: Quantitative Approaches to Decision Making, Cengage Learning, 2008.
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168. V.K. Kapoor, Operations Research.
169. Dharani Venkatakrishnan, Operations Research: Principles and Problems.
170. Hamdy A. Taha, Operations Research: An Introduction, Prentice Hall, 2002.

## **35815 - FINANCIAL AND MANAGEMENT ACCOUNTING**

### **Objectives:**

- To enable the students to learn basic accounting principles, concepts.
- To practice Financial and Management accounting applications
- To make the learners familiarize in managerial decision making.

### **BLOCK I: BASICS OF FINANCIAL AND MANAGEMENT ACCOUNTING**

- UNIT 1     Accounting: Definition – Accounting for historical function and managerial function - Types of Accounting- Management, Management and Cost accounting – Scope for Accounting-Manual Uses of Management accounting and Financial Accounting.
- UNIT 2     Accounting Concepts and Conventions – Accounting standards - Financial Accounting Definitions – Principles – Accounting standards - Double entry system of accounting: Accounting books – Preparation of journal and ledger, subsidiary books.
- UNIT 3     Preparation of Trial Balance – Errors and rectification – Classifications of capital and Revenue – Fixed Assets and Depreciation accounting – Preparation of Manufacturing accounting- Preparation of Final Accounts - Accounting from incomplete records – Statements of affairs methods
- UNIT 4     Conversion methods – Preparation of Trading, Profit & Loss Account and Balance Sheet from incomplete records – Depreciation methods - Straight line method, Written down value method, Sinking fund method.

### **BLOCK II: FINANCIAL RATIO ANALYSIS**

- UNIT 5     Financial Statement Analysis - Objectives - Reorganizing the Financial Statement information -Techniques of Financial Statement Analysis: Comparative Statements, Common – Size statement, Trend Percentage -
- UNIT 6     Management Statement Analysis: Management statements – Nature of management statements – Limitations of management statements – Analysis of interpretation -Types of analysis- Tools of analysis: Trend analysis, Common size statements and Comparative statements;

UNIT 7     Accounting Ratios: Construction of balance sheet using ratios (problems) – Financial ratios – Types: Profitability ratios – Turnover ratios – Liquidity ratios – Proprietary ratios – Market earnings ratios- Uses and limitations of ratios - Dupont analysis.

UNIT 8     Fund Flow Analysis: Need and meaning – Preparation of schedule of changes in working capital and the fund flow statement – Workings for                      Computation of various sources and uses - Preparation of Fund Flow Statement

### **BLOCK III: CASH FLOW ANALYSIS**

UNIT 9     Cash flow Analysis: Meaning and importance Managerial uses of cash flow statement – Differences between fund flow and cash flow analysis - Uses and limitation of fund flow statement-                      Preparation of cash flow statement

UNIT 10    Cost Accounting: Cost Accounting - Meaning - Distinction between Financial Accounting and Cost Accounting - Cost Terminology: Cost, Cost Centre, Cost Unit - Elements of Cost - Cost Sheet – Problems - Overhead Cost Allocations: Over and under Absorption. Job and Contract Costing,

UNIT 11    Operating Costing: Material Cost Accounting, Perpetual Inventory Control, Inventory Valuation, EOQ, ABC Analysis, Setting of Reorder Level, Maximum Level, Minimum Level, Labour Cost Accounting, Remuneration and Incentive Schemes- Reconciliation of Financial and Cost Accounting

### **BLOCK IV: COSTING AND CAPITAL BUDGETING**

UNIT 12    Marginal Costing: Definition – Difference between marginal costing and absorption costing – Break- even point Analysis - Contribution, p/v Ratio, margin of safety - Decision making under marginal costing system-key factor analysis, make or buy decisions, export decision, sales mix decision-Problems

UNIT 13    Budgeting and Budgetary Control:    Concept and Need for Budgeting- Classification of budgets – Preparation of Sales, Production, Material, Purchase and Cash Budgets –Budgetary control system – Mechanism – Master budget.

UNIT 14    Capital Budgeting System: Importance – Methods of capital expenditure appraisal – Payback period method – ARR method – DCF methods – NPV and IRR methods – Their rationale – Capital rationing.

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156. N. K. Prasad, Advanced Cost Accounting, Book Syndicate Pvt. Ltd., Calcutta.
157. Andrew A Haried, Advanced Accounting, Atlantic Publishers.
158. Hoyle, Advanced Accounting, McGraw Hill.



## **35821- RESEARCH METHODS**

Objectives:

- To Understand the basic principles of research and design
- To practice the research process, tools and techniques
- To facilitate managerial decision making

### **BLOCK I: FUNDAMENTALS OF RESEARCH**

- UNIT 1     Research Bases: Definition and applications of business research; Types of research –descriptive, exploratory, correlational, explanatory, quantitative, qualitative; Steps in the research process; establishing operational definitions
- UNIT 2     Research scope - Recent advancements in research. Distinction between Pure & Applied, Historical & Futuristic, Analytical & Synthetic, Descriptive & Prescriptive, Survey & Experimental and Case & Generic Researches
- UNIT 3     Planning of Research: Research problem – Identification, selection and formulation of research problem – Review of literature in the field of business - Identifying objectives of the research.
- UNIT 4     Economic management: Use in identifying Research Gaps and Techniques – Hypothesis – Meaning – Sources and Types of Hypothesis – Hypothesis Formulation for testing – Research design – Factors affecting research design – Evaluation of research design

### **BLOCK II: SAMPLING AND ITS TYPES**

- UNIT 5     Variables construction for Hypothesis: Identifying variables - Constructing hypotheses – functions, characteristics, types of hypotheses - Significance of research in social sciences – Induction and deduction.
- UNIT 6     Sampling Design: Census method and sampling method for investigation – Principle of sampling – Essentials of a good sampling – sampling frame; Methods of sampling: Probability, non-probability, mixed sampling designs;
- UNIT 7     Construction of sampling for Finite and Infinite populations – Sample size determination– Calculations - Factors affecting the size of the sample – Biased sample – Sampling and non-sampling errors.
- UNIT 8     Sources and Collection of Data: Sources of data – Primary and secondary data – Modes of data collection – Observation: Types and Techniques –Interview:

Types and conduct – Preparation for an interview – Effective interview techniques – Limitations of interview

### **BLOCK III: TOOLS OF DATA COLLECTION**

- UNIT 9     Schedule: Meaning and kinds – Essentials of a good schedule – Procedure for the formulation of a schedule – Questionnaire: Meaning and types – Format of a good questionnaire– Schedules Vs. Questionnaires
- UNIT 10    Scaling techniques: Meaning, Importance, Types of measurement scales – Nominal, Ordinal, Interval, Ratio; Methods of their construction of Questionnaires or Schedules – Pre-testing of Data Collection Tools- Validity and Reliability – Methods.
- UNIT 11    Processing and Analysis of Data: Meaning – Importance – Process of data analysis – Editing – Coding – Tabulation – Diagrams – Univariate, Bivariate and Multi-variant analysis

### **BLOCK IV: HYPOTHESIS AND REPORT WRITING**

- UNIT 12    Test of Significance: Fundamentals on Test Procedure- Testing for significance of Mean/Proportion and difference between Means/Proportions- F Test for Means and Chi-square test Contingency Table - Parametric Test: T test, F Test and Z test
- UNIT 13    Non-parametric Test: Concept and Types: Mann Whitney Test- Test, Kruskal Wallis, sign test. Multivariate analysis-factor, cluster, MDS, Discriminant analysis - The process of interpretation of Test Results– Guidelines for making valid interpretation
- UNIT 14    Report Writing : Role and types of reports – Contents of research report – Steps involved in drafting reports – Principles of good report writing – Grammatical Quality – Language flow- Data Support- Diagrammatic Elucidation- References and Annotations – Clarity and Brevity of expressions- Features of a good Report- Criteria for evaluating research reports/ research findings.

## REFERENCES

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4. Wilkinson and Bhandarkar, Methods and Techniques of Social Research, 2003, HPH.
5. Earl R. BabbieRobert, ThePractice of Social Research, Cengage Learning, 2010.
6. B. Burns & A. Burns, Business Research Methods and Statistics Using SPSS, Sage Publications, 2008.
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9. Pauline V Young, Scientific Social Surveys and Research, Prentice-Hall, (Digitalized) 2007.
10. C.R.Kothari, Research Methodology: Methods and Techniques, 2009

## **35822- BUSINESS ENVIRONMENT**

### **Objectives:**

- To understand the concepts and constituents of Business environment
- To know the environmental issues in the business context
- To analyze the changes in the global environmental relating to business

### **BLOCK I: BASICS OF BUSINESS ENVIRONMENT**

- UNIT 1 Business Environment: Introduction: Concepts – Significance - Dynamic factors of environment – Importance of scanning the environment – Macro and Micro Environment – Micro and Macro Economics to the business – Constituents of Business environment
- UNIT 2 Fundamental issues captured in PESTLE– Political, Economic, Socio-cultural, Technological, Legal and Ecological environment- Opportunities and Threats as environmental issues to address by Businesses.
- UNIT 3 Political Environment: Government and Business – Political Systems, Political Stability and Political Maturity as conditions of business growth - Role of Government in Business: Entrepreneurial, Catalytic, Competitive, Supportive, Regulative and Control functions
- UNIT 4 Government and Economic planning: Industrial policies and promotion schemes – Government policy and SSI – Interface between Government and public sector - Guidelines to the Industries – Industrial Development strategies; salient features, Role of public and private sectors, Comparative cost dynamics.

### **BLOCK II: ECONOMIC AND INTERNAL ENVIRONMENT**

- UNIT 5 Economic Environment: Phase of Economic Development and its impact- GDP Trend and distribution and Business Opportunities – capacity utilisation – Regional disparities and evaluation - Global Trade and investment environment.
- UNIT 6 Financial System and Business capital: Monetary and Fiscal policies - Financial Market structure – Money and Capital markets – Stock Exchanges and Its regulations – Industrial Finance - Types, Risk - Cost-Role of Banks; Industrial Financial Institutions - Role of Management Institutions
- UNIT 7 Role of Central Bank- Fiscal System: Government Budget and Taxation Measures- Fiscal Deficits and Inflation- FDI and collaboration –Foreign Capital

tapping by businesses- Export-Import policy – Foreign Exchange and Business Development.

- UNIT 8 Labour Environment: Labour Legislation – Labour and social securities – Industrial Relations – Trade Unions – Workers participation in management – Exit Policy – Quality Circles.

### **BLOCK III: SOCIAL AND TECHNOLOGICAL ENVIRONMENT**

- UNIT 9 Social and Technological Environment: Societal Structure and Features- Entrepreneurial Society and its implications for business – Social and cultural factors and their implications for business- Technology Development Phase in the Economy as conditioner of Business Opportunities

- UNIT 10 Technology Environment: Technology Policy- Technology Trade and transfer- Technology Trends in India- Role of Information Technology – Clean Technology. – Time lag in technology – Appropriate technology and Technology adoption- Impact of technology on globalization.

- UNIT 11 Legal and Ecological Environment: Legal Environment as the all-enveloping factor from inception, location, incorporation, conduct, expansion and closure of businesses – IDRA and Industrial licensing – Public, Private, Joint and Cooperative Sectors.

### **BLOCK IV: NEW ECONOMIC POLICY AND LEGAL ENVIRONMENT**

- UNIT 12 Legal Aspects of Entering Primary and Secondary Capital Markets- Law on Patents- Law on Consumer Protection- Law on Environmental Protection- Need for Clean energy and Reduction of Carbon footprint.

- UNIT 13 New Economic Policy Environment in India: Liberalization, Privatization and Globalization (LPG): Efficiency Drive through Competition- Facets of Liberalization and impact on business growth

- UNIT 14 Aspects of Privatization and impact on business development– Globalization and Enhanced Opportunities and Threats – Extended competition in Input and Output Markets Role of WTO, IMF and World Bank in global economic development.

## REFERENCES

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117. Amarchand D, Government and Business, TMH.
118. Francis Cherunilam, Business Environment and Development, Himalaya Publishing House, 2008.
119. Maheswari & Gupta, Government, Business and Society.

## **35823 - BUSINESS LAWS**

### **Objectives:**

- To understand the legal structure and provision for running a business
- To learn various acts, enactments and amendments of mercantile law
- To know the various aspects of Business law for legal process.

### **BLOCK I: BASICS OF BUSINESS LAW**

- UNIT 1 Indian Contract Act 1872: Contract – Meaning – Essential elements – Nature and formation of contract: Nature, elements, Classifications of Contracts on the basis of Validity, Formation and Performance– offer and acceptance
- UNIT 2 Offer and Acceptance: Introduction – Proposal – acceptance – Communications of offer, Acceptance and Revocations – Offer and acceptance by Post.
- UNIT 3 Consideration: Definitions, Types of consideration – essentials of Consideration – Privity of Contracts: Exceptions – Capacity: Consent – Legality of object – Quasi contract Discharge of contract - Remedies for breach of contract – Quasi contracts.
- UNIT 4 Special Contracts: Contract of Indemnity and Guarantee – Bailment and Pledge – Law of Agency-Definition – Rights of Surety -Discharge of Surety – Bailment and Pledge: Introduction, Classifications, Duties and Rights of Bailer and Bailee – termination of Bailment -

### **BLOCK II: PARTNERSHIP AND COMPANY ACT**

- UNIT 5 Formation of contract under Sale of Goods Act, 1930: Contract of sale - Conditions and Warranties - Transfer of property - Performance of the contract: Essentials of valid tender performance, Performance reciprocal promise- Rights of an unpaid seller.
- UNIT 6 Laws on Carriage of Goods: Duties, Rights and Liabilities of Common Carriers under: (i) The Carriers Act, 1865. (ii) The Railways Act, 1989, (iii) The Carriage of Goods by Sea Act, 1925, (iv) The Carriage by Air Act, 1972 and (v) The Carriage By Road Act, 2007
- UNIT 7 Negotiable Instruments Act, 1881: Negotiable Instruments: Features – Types- Parties – Material alteration – Parties to negotiable instruments – Presentations of negotiable instrument.

- UNIT 8 Insurance: Definition and sources of Law – Judicial set up in India — Insurance as a contract -History of Insurance Legislation in India - Legal principles - Fundamental Principles of Life Insurance Fire Insurance and Marine Insurance.

### **BLOCK III: IPR AND IT**

- UNIT 9 Indian Partnership Act, 1932: Meaning and test of partnership – registration of firms Life Insurance Corporation Act 1956 – General Insurance Business Nationalization Act 1973.

- UNIT 10 Partners Relations: Introduction – Eligibility to be a partner – Registration of change in partner – Limited Liabilities of partnership - Dissolution of firms - Characteristics – Kinds – Incorporation of Companies – Memorandum of Association – Articles of Association

- UNIT 11 Companies Act 1956: Nature and kinds of companies – Prospectus – Disclosure Needs - Management and Administration – Director – Appointment, Powers and Duties

### **BLOCK IV: MSME**

- UNIT 12 Formation of a Company : Introduction – process - Minutes and Resolutions – E-Filing of documents under Ministry of Corporate Affairs (MCA) 21- Management of companies –Meetings- Types- Requirements -AGM and EGM – Board Meeting

- UNIT 13 Law of Information Technology: Introduction – Rationale behind IT act 2000 – Information technology Act 2000: Scheme of the IT Act 2000: Digital signature: attribution; Acknowledgement and dispatch of Electronics Record – Regulation certifying authorities.

- UNIT 14 Protection of minority interest: Introduction - Methods of Winding-up - The Right to Information Act, 2005 Right to know, Salient features of the Act, obligation of public Authority, Designation of Public Information officer, Request for obtaining information,

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## **35824- MANAGEMENT INFORMATION SYSTEM**

### **Objectives:**

- To learn the principles of Management Information System for organizations
- To understand the uses , function of application MIS in organization
- To analyze the scope of MIS for business organizations

### **BLOCK I: BASICS OF MANAGEMENT INFORMATION SYSTEM**

- UNIT 1 Foundations of Information System: Information system: Meaning, Role – System concepts – Organization as a system – Components of Information system – Various activities of IS and Types of IS
- UNIT 2 Information System: Concepts of Information System and Management information systems design and development-Implementation testing and conversion- Evolution and element of MIS
- UNIT 3 MIS : Definition – Characteristics and basic requirements of MIS – Structure of MIS- Approaches to MIS development- Computerized MIS- Pre-requisites of an effective MIS- Limitations of MIS.
- UNIT 4 MIS and Decision support System (DSS): MIS Vs. data processing – MIS and decision support system – MIS and information resource management – DSS and AI – Overview of AI - DSS models and software.

### **BLOCK II: COMMUNICATION USAGE OF MIS**

- UNIT 5 MIS and Operations Research- Executive information and Decision support systems – Artificial intelligence and expert system – Merits and De Merits – Pitfalls in MIS.
- UNIT 6 MIS in Indian organizations – Recent developments in information technology - Installation of Management Information & Control System in Indian organization
- UNIT 7 Computers and Communication: Information technology and Global integration –On-line information services – Electronic bulletin board systems – The internet, electronic mail, interactive video
- UNIT 8 Communication Channels: Advantages disadvantages – Communication networks – Local area networks – Wide area networks – Video conferencing- Relevance to MIS- Usage in Business process.

### **BLOCK III: MIS FUNCTIONS AND FEATURES**

- UNIT 9 Functional Information systems: MIS for Research Production - MIS for Marketing - MIS for Personnel - MIS for Finance - MIS for Inventory- MIS for Logistics- MIS for Product Development- MIS for Market Development.
- UNIT 10 Client/ Server Computing: Communication servers – Digital networks – Electronic data interchange and its applications - Enterprise resource planning systems (ERP Systems) – Inter-organizational information systems – Value added networks – Networking.
- UNIT 11 Electronic Commerce and Internet: E-Commerce bases – E-Commerce and Internet – M-Commerce- Electronic Data Inter-change (EDI) - Applications of internet and website management - Types of Social Media - uses of social media in business organization

### **BLOCK IV: COMPUTER SYSTEMS AND ETHICAL CHALLENGES OF MIS**

- UNIT 12 Computer System and Resources: Computers systems: Types and Types of computer system processing - Secondary storage media and devices – Input and output devices – Hardware standards – Other acquisition issues.
- UNIT 13 Managing Information Technology: Managing Information Resources and technologies – IS architecture and management - Centralized, Decentralized and Distributed - EDI, Supply chain management & Global Information technology Management.
- UNIT 14 Security and Ethical Challenges: IS controls - facility control and procedural control - Risks to online operations - Denial of service, spoofing - Ethics for IS professional - Societal challenges of Information technology

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## **35825- HUMAN RESOURCE MANAGEMENT**

Objective:

- To understand the concepts and methods and techniques of Human Resource Management
- To know the Human resource management theories and real time practices
- To identify the contemporary issues in human resource management

### **BLOCK I: BASICS OF HUMAN RESOURCE MANAGEMENT**

- UNIT 1: Introduction to Human Resource Management: Concept, Definition, Objectives, Nature and Scope of HRM - Functions of HRM – Evolution of human resource management - Role and structure of Human Resource Function in organizations- Challenges in Human Resource Management
- UNIT 2 Human Resource Management Approaches: Phases of human resource Management- The importance of the human factor – Competitive challenges of HRM – HRM Models – Roles and responsibilities of HR department.
- UNIT 3 Human Resource Planning: Personnel Policy - Characteristics - Role of human resource manager – Human resource policies – Need, Scope and Process – Job analysis – Job description – Job specification- Succession Planning.
- UNIT 4 Recruitment and Selection Process: Employment planning and forecasting Sources of recruitment- internal Vs. External; Domestic Vs. Global sources- Selection process Building employee commitment : Promotion from within - Sources, Developing and Using application forms – IT and recruiting on the internet.

### **BLOCK II: RECRUITMENT & SELECTION**

- UNIT 5 Employee Testing & selection : Selection process, basic testing concepts, types of test, work samples & simulation, selection techniques, interview, common interviewing mistakes, Designing & conducting the effective interview, small business applications, computer aided interview.
- UNIT 6 Training and Development: Orientation & Training: Orienting the employees, the training process, need analysis, Training techniques, special purpose training, Training via the internet. - Need Assessment - Training methods for Operatives and Supervisors
- UNIT 7 Executive Development: Need and Programs - Computer applications in human resource management – Human resource accounting and audit. On-the - job and off-the-job Development techniques using HR to build a responsive organization

- UNIT 8 Employee Compensation : Wages and Salary Administration – Bonus – Incentives – Fringe Benefits –Flexi systems - and Employee Benefits, Health and Social Security Measures,

**BLOCK III: EMPLOYEES APPRAISALS**

- UNIT 9 Employee Retention: Need and Problems of Employees – various retention methods– Implication of job change. The control process – Importance – Methods – Employment retention strategies for production and services industry
- UNIT 10 Appraising and Improving Performance: Performance Appraisal Programs, Processes and Methods, Job Evaluation, Managing Compensation, Incentives Performance appraisal: Methods - Problem and solutions - MBO approach - The appraisal interviews - Performance appraisal in practice.
- UNIT 11 Managing careers: Career planning and development - Managing promotions and transfers - Sweat Equity- Job evaluation systems – Promotion – Demotions – Transfers- Labour Attrition: Causes and Consequences

**BLOCK IV: APPRAISAL AND TRAIL UNION**

- UNIT 12 Employee Welfare, Separation: Welfare and safety – Accident prevention – Employee Grievances and their Redressal – Industrial Relations - Statutory benefits - non-statutory (voluntary) benefits – Insurance benefits - retirement benefits and other welfare measures to build employee commitment
- UNIT 13 Industrial relations and collective bargaining: Trade unions – Collective bargaining - future of trade unionism - Discipline administration - grievances handling - managing dismissals and workers Participation in Management-Separation: Need and Methods.
- UNIT 14 Human Resource Information System- Personnel Records/ Reports- e-Record on Employees – Personnel research and personnel audit – Objectives – Scope and importance.

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## **35831- MARKETING MANAGEMENT**

### **Objectives:**

- To help the learners understand markets, consumers and marketing principles.
- To understand the buyer behaviour and influencing factors
- To learn marketing plan, pricing, promotion and distribution in global context

### **BLOCK I: BASICS OF MARKETING MANAGEMENT**

- UNIT 1 Introduction to Marketing: Meaning and Scope of Marketing; Marketing Philosophies; Marketing Management Process-an overview; Modern Marketing Concept: Social marketing concept – Approaches to the study of marketing.
- UNIT 2 Marketing segmentation: Meaning – Bases for segmentation, benefits – Systems approach - Four Ps of Product and Seven Ps Service marketing mix and Extensions- Targeting and Positioning - meaning and importance.
- UNIT 3 Marketing Environment: Internal and External and Demographic factors – Adopting marketing to new liberalized and globalized economy – Digitalization – Customization and E business settings.
- UNIT 4 Consumer Behaviour : Meaning and importance – Consumer buying process – Determinants and Theories of consumer behaviour – Psychological, sociological determinants – Theories and their relevance to marketing-

### **BLOCK II: MARKETING RESEARCH AND PROCESS**

- UNIT 5 Marketing Research: Procedure. Meaning – Objectives – Process- Demand Forecasting- Marketing Information System – Strategic marketing plan and organization – Changing marketing practices.
- UNIT 6 Product Mix Management: Product planning and development – Meaning and process – Test marketing – Product failures – Product line management: Practices – Implications and Strategies for current market condition.
- UNIT 7 Product life cycles: Meaning and Stages – Strategies – Managing PLC- Product-Market Integration: Strategies – Product positioning – Diversification – Product line simplification – Planned obsolescence – Branding Policies and Strategies – Packing.
- UNIT 8 Price Mix Management: Pricing and pricing policies – Objectives – Procedures – Bases for and Methods of price fixing. Cases for Free Pricing, Administered and Regulated pricing – Pricing and product life cycle

### **BLOCK III: DISTRIBUTION MIX**

- UNIT 9 Physical Distribution Mix: Types of physical Distribution - Importance of Physical Distribution- Distribution channel policy – Logistics Decisions – Methods – Strategic alliance for Logistic cost reduction.
- UNIT 10 Marketing Channel system: Marketing channel decisions: Choice considerations– Managing Conflict and Cooperation in channels – Middlemen functions- Modern Trends in Retailing- Malls and Online.
- UNIT 11 Promotional Mix: Personal selling Vs. impersonal selling – Personal selling – Process – Steps in selling – Management of sales force – Recruitment and selection – Training – Compensation plans – Evaluation of performance

### **BLOCK IV: ADVERTISING AND COMPETITOR ANALYSIS**

- UNIT 12 Integrated marketing communication Process: Advertising and sales promotion – Online Sales promotional activities – Public relationships – Direct marketing: Meaning, Nature, Growth and Channels.
- UNIT 13 Advertising: Importance – Objectives – Media planning and selection – Factors influencing selection – Advertisement copy – Layout – Evaluation of advertising – Advertising budget – Sales promotion – Methods and practices.
- UNIT 14 Competitor analyses: Identifying and analyzing the competitors – Types of Competitors – Competitive strategies framing for leaders, challengers, followers and nichers. Customer relationship marketing: Customer data base, Data ware housing and data mining

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## **35832 - FINANCIAL MANAGEMENT**

### **Objectives:**

- To help the students to know the basic concepts of financial management
- To understand capital structure, dividend policy and working capital management.
- To learn the various concepts of financial management along with applications

### **BLOCK I: BASICS OF FINANCIAL MANAGEMENT**

- UNIT 1 Introduction: Financial management: objectives - Concept, nature, evaluation and significance – Finance Functions: Managerial and operative – Role of Financial management in the organization – Indian Financial system.
- UNIT 2 Financial System: Legal and Regulatory frame work – Financial Functions: Meaning and scope – Finance and Tax Management Nexus- Tax Avoidance and Tax evasion- Tax incentive and business decisions.
- UNIT 3 Investment Function: Meaning and scope - Time value of Money concepts and applications –Risk return relationship - Dividend function – Risk return trade off – Management planning- Global management environment
- UNIT 4 Long-term Capital Resources: Equity and debt sources – Equity share, preference shares – types of preference share - debentures – types - sources of long-term capital.

### **BLOCK II: CAPITAL STRUCTURE**

- UNIT 5 Capital Issues: Meaning, Nature, Purpose – Roles and Guidelines of SEBI in capital issues- Bridge finance, loan syndication, Book building – Borrowings from the term lending institutions and International capital market- Tax considerations in financing decision areas.
- UNIT 6 Cost of Capital : Concept of cost of capital- Cost of debt, equity, preference share capital, retaining earning - Weighted average cost: EBIT –EPS Analysis- Tax, Capital structure and Value nexus - Computation of overall cost of capital – Tax and cost of capital.
- UNIT 7 Capital structure: Determinates - Concept and Types- Optimum capital structure – Theories of capital structure – Net income and net operative income approach – M.M. Approach – Traditional theory – Their assumptions – Significance and limitations – Management leverage operating leverage – Combined leverage.
- UNIT 8 Capital budgeting: Meaning, Nature and Types of Capital Investment- Methods of appraisal under certainty conditions: PBP, ARR, IRR and NPV techniques - Basic and International capital budgeting.

### **BLOCK III: SOURCES OF FINANCE**

- UNIT 9     Uncertainty and Risk models: Simulation Analysis- Sensitivity analysis- Decision tree analysis- Certainty equivalent and risk-adjusted return measures- Tax considerations in Investment Decisions Cost of capital and Investment Decisions.
- UNIT 10    Working Capital Management: Definitions and Objectives - Concept and types – Determinants – Financing approaches – Conservative approaches - Sources of working capital finance Factors affecting working capital requirements- Working capital financing by commercial banks – Types of assistance
- UNIT 11    Inventories and receivables Management under conditions of certainty and uncertainty – Operating cycle – Planning of funds through the management of assets – Various techniques used.

### **BLOCK IV: WORKINGCAPITAL AND DIVIDEND POLICY**

- UNIT 12    Cash and liquidity management: Credit Management and evaluation alternative credit variables Methods and Functions- Tax considerations in Remittances and Purchases.
- UNIT 13    Dividend Theories: Valuation under Gordon and Walter theories – Dividend irrelevance under M.M. Theory – Assumptions – Limitations - Implications and contributions of theories in financial decision making process.
- UNIT 14    Dividend Policy: Types – Share valuation practices – Factors affecting dividend decision – Tax considerations in dividend decision when tax is levied at the hands of companies and recipients.

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## **35833- OFFICE AUTOMATION**

Objective:

- To understand the basic and introduction of computing
- To gain the knowledge with application programs

### **BLOCK I: BASICS OF OFFICE AUTOMATION**

- UNIT 1 Introduction: Basics and Evolution of Computing – Hardware and Software Aspects – Modern IT accessories- System Software, Operating Systems, and Application Softwares.
- UNIT 2 Introduction to Network: Setting – LAN and WAN, Internet and Intranet- Information Needs of Business and IT support – Impact of IT on Business Excellence.
- UNIT 3 Windows: Working with windows elements –Windows Desktop – View Drives with My Computer - Managing files with Windows Explorer – Working with multiple windows
- UNIT 4 Office Shortcut Bar – Start and Exit Office application – Menu Commands – Toolbars – Dialog boxes – Getting help in MS-Office – Creating, Opening, Saving Files.

### **BLOCK II: WORKING WITH MS OFFICE**

- UNIT 5 Working with Microsoft Office Suite: MS Word – Creating, Opening, Saving and Formatting Documents - Headers and Footers - Spell Checking -Mail Merge- Printing a document – Print preview – Page Orientation - Zoom in and Zoom out pages
- UNIT 6 Working with Spread Sheets: MS Excel – Tables – Formulas and Functions – Data Analysis using excel – Linking Work Sheets and Work Books – Charts – Macros Forms – Pivot Tables.
- UNIT 7 MS Power Point: Creating a Power Point Presentation (PPT) Using Slide Master, Animation and Graphics in PPT - View Slide Show – Handouts.
- UNIT 8 MS Access – Creating and Modifying Data Bases – Report Generation – Linking Access Files with Excel Files. MS: Project: Creating Project Design, Schedules, PERT / CPM Charts and Reports.

### **BLOCK III: INTERNET AND E-BUSINESS**

- UNIT 9      Internet and E-Commerce: E-Mail Etiquette - Usages of Search Engines and Portals – Website and Web Based E-mail, FTP and Net Meeting – WiFi Environment in Modern      Offices- E- advertisements
- UNIT 10     Basic Models of E-Business: Business to Business (B2B), Business to Customer(B2C), Customer to Customer (C2C) and Mobile Commerce (M-Commerce)
- UNIT 11     Buying and Selling through Internet: E-Payment and Electronic Fund Transfer – E- ticketing – IT for Supply chain- online shopping.

#### **BLOCK IV: EDI AND ERP**

- UNIT 12     Payment Gateway and Security Systems – On-line Stores – E-banking- Internet Banking –Mobile Banking- Smartcards and Plastic Money.
- UNIT 13     Electronic Data Interchange (EDI) - Enterprise Resource Planning System (ERP) - Data Mining- Data Warehousing- Big Data Analytics-Teleconferencing.
- UNIT 14     Online office suite- Paperless Office - Telecommuting or Telework- Virtual Team- Virtual Business – Cashless Office – E-transactions.

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## **35834- INTERNET PROGRAMMING AND WEB DESIGN**

### **Objectives**

- To understand the basics of internet programming
- To gain knowledge on internet programming languages.

### **BLOCK I: BASICS OF INTERNET PROGRAMMING**

- UNIT 1 An overview of internet programming – web system architecture- internet – intranet – LAN – MAN –WAN-Domain Name System - Name Server Concepts - Resolver
- UNIT 2 Internet Protocols : Finger user information protocol - Internet E-mail - Mail Transfer Protocol - File Transfer Protocols - Managing Data - Tele net - HTTP - HTTP client Requests & response - URI - URLs - HTTP methods - Programming the WEB - Creating Web Server.
- UNIT 3 WWW design issues – Network Security - Encryption – Decryption - Developing Intranet applications. Internet at Home - Entertainment on the Internet - Television and the Net, Movies and Music - At Office : Electronic Commerce - Shopping on the internet, Doing Business, Finding Job - At School :
- UNIT 4 Internet Programming Languages: Java –Common Gateway Interface (CGI) - PERL: Strawberry Perl or Active Perl – Microsoft Internet implementation.

### **BLOCK II: INTERNET MARKUP LANGUAGES**

- UNIT 5 Java basics – Object Oriented Programming Principles - Java Classes and Objects - I/O streaming – concept of streams –stream classes – byte stream classes – character Stream - files
- UNIT 6 Client/server programs – Looking up Internet Address - Socket programming - E-mail client – SMTP - POP3 programs – web page retrieval –protocol handlers – content handlers - Remote Method Invocation.
- UNIT 7 Applets –How applets differ from Applications – preparing to write applets – Building Applet Code – Applet life cycle – creating an Executable Applet – Designing a Web age – Applet Tag – Adding Applet to HTML file – Running the Applet image handling
- UNIT 8 Internet Markup Languages: HTML & SGML: Introduction- Basic HTML- Formatting and Fonts- Commenting Code- Anchors- Backgrounds- Images- Hyperlinks- Lists- Tables- Frames- simple HTML Forms-XHTML

### **BLOCK III: VB SCRIPT AND EVENT**

- UNIT 9     DHTML /CSS : Netscape extensions – Microsoft internet explorer – Only HTML tags – Shockwave and Lingo- Dynamic HTML – introduction – cascading style sheets.
- UNIT 10    Internet Scripting Languages: Java Script – Java Script Event driven programming - VB Script – VB Event driven programming - Other Scripting languages
- UNIT 11     ActiveX Controls: Creating an ActiveX control to activate a Web Page – VDO Live Technology – Creating Netscape Navigator Plug-ins

#### **BLOCK IV: GRAPHICS DESIGN**

- UNIT 12     Application Development: Introduction - Pulling web information – Creating a custom integrated application with multiple protocols.
- UNIT 13     Web Graphics: Introduction - A graphic view of web – Essay web graphics – Working with Images and Hyperlinks – Adding graphics to web pages
- UNIT 14     Graphics Design : Introduction – Web Site and page design – Framing your graphics – Dynamic graphics – Animation fundamentals.

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## **35835- MULTIMEDIA AND APPLICATIONS**

Objective:

- To understand the need, benefits and problems of Multimedia
- To gain knowledge on media types and video compression technique

### **BLOCK I: BASICS OF MULTIMEDIA APPLICATIONS**

- UNIT 1      Multimedia in Use and Technology: Introducing multimedia – Multimedia definition –Need , benefits and problems
- UNIT 2      Multimedia System components – Introduction - Multimedia platforms – Multimedia Development tools – Flash – Director – Studiomax – Multimedia Authoring tools
- UNIT 3      Multimedia Cross platform compatibility – Introduction - multimedia Commercial tools – Multimedia Standards.
- UNIT 4      Media Types: Introduction - Non-temporal – Text, image, graphics – Temporal - Analog, digital audio/video, music, animation, other media types

### **BLOCK II: VIDEO AND MPEG STANDARDS**

- UNIT 5      Multimedia Extended images, Introduction - Multimedia digital ink fundamentals, Multimedia speech audio overview.
- UNIT 6      Multimedia data compression: Types of compression color, gray scale and still video image compression video image compression audio compression .Digital Video and Image Compression: Introduction - Evaluating a compression system – Redundancy and visibility
- UNIT 7      Video compression techniques – Introduction - Image compression standards – Data and file formats: RTF TIFF RIFF, MIDI, JPEG, AVI video file formats, MPEG standards.
- UNIT 8      Multimedia I/O technologies: Pen input Video and Image display systems Print output technologies image scanners digital voice and audio digital camera Video images and animation full motion video.

### **BLOCK III: MULTIMEDIA ENVIRONMENT**

- UNIT 9      Multimedia storage and retrieval technologies: Introduction - Optical media - hierarchical storage management - cache management for storage systems.
- UNIT 10     Object Oriented Multimedia: Introduction - Objects, Classes and related items – Multimedia Frameworks: Overview – Multi Media classes, Introduction - Transform classes, Format classes, Component classes.
- UNIT 11      Multimedia Environments: Introduction - The Compact Disk CD family, CD-I Overview – Media types – Media organization

#### **BLOCK IV: MULTIMEDIA VISUALLY COUPLED SYSTEM**

- UNIT 12      Architecture and operations, Applications: Media in real world – Multimedia on networks –Training and education.
- UNIT 13      Virtual Reality: Introduction : Intelligent Multi Media System- Multimedia Desk-top Virtual Reality (VR) Multimedia VR operating system - Introduction - Virtual Environment Display and Orientation making.
- UNIT 14      Multimedia visually coupled system requirements – Introduction – Multimedia Intelligent Virtual Reality software systems.

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## **35841 - MANAGEMENT CONTROL SYSTEMS**

Objective:

- To understand the nature of management control
- To gain knowledge on goals and strategies MCS

### **BLOCK I: BASICS OF MANAGEMENT CONTROL SYSTEMS**

- UNIT 1 Management Control: Meaning, scope, nature, function- Types of organization, features and implications
- UNIT 2 Stages of management control system: Procedure, task, challenges, problems and prospects.
- UNIT 3 Organizational Behaviour: Types, features, socio, economic, cultural, environmental, psychological, ethical, and value system and their implications.
- UNIT 4 Formal and informal, horizontal and vertical types of organizations, hierarchy, influencing factors for effective organization and their implications.

### **BLOCK II: PERT, CPM & KPP**

- UNIT 5 Types of control and variations, EVOQ, ABC, BEP methods for evaluation of control system- organization structure and design.
- UNIT 6 Goals and Strategies for Management Control- Strategic and tactic, decision making process, decision tree-prudential decision and its issues.
- UNIT 7 Key variables in management control design and their types – Key result areas, CPM, PERT, KPP, challenges.
- UNIT 8 Management Control Structure – Horizontal and vertical, problems pertaining to effective management control system – essentials of successful MCS.

### **BLOCK III: M.I.S FOR MANAGEMENT CONTROL SYSTEMS**

- UNIT 9 Profit centers – Transfer pricing, day to day policy, fixed price policy, active price policy, factors influencing the correct price policy - Investment decision, problems of pricing policy.
- UNIT 10 Programming and budgeting, budgetary control, various budgets of control, flexible budget relating to cost reduction, economy of investment –

Analysing, reporting, essentials of good reporting – Performance evaluation.

- UNIT 11 M.I.S. for Management Control – Systems, subsystems, reporting management system, downward and upward management information system- theory and management control.

#### **BLOCK IV: SERVIQ, WTO AND GATT**

- UNIT 12 Installation of management information and control system – Structured and unstructured decision – Implications.
- UNIT 13 Special Management Control Situations –  
Multinational companies, WTO, GATT, IBRD – SERVIQ,
- UNIT 14 Non-profit organisations, Preparation of receipt and payment accounts, trial balance, balancesheet – Multi-project organization, types of non-profit organization, issues and challenges.

#### **REFERENCES :**

1. The Strategic Management of Intellectual Capital by David A. Klein, 1997
2. Strategic Management 9th Edition, Hitt, Publisher: Cengage Learning, 2012.
3. [Arabinda Bhandari, Raghunath Prasad Verma](#), Strategic Management : A Conceptual Framework 1st Edition, Publisher: Mcgraw Hill Education, 2013
4. Strategic Management 14th edition, by Fred R David
5. Anthony, Dearden & Bedford, Management Control Systems.
6. Srinivasan N.P & Gupta, Management Control Systems.
7. Chackraborthy, Management by Objectives: An Integrated Approach.

## **35842 - RE-ENGINEERING AND FLEXI SYSTEMS**

Objective:

- To know the concept and significance of Re – engineering
- To understand the process and design of re - engineering.

### **BLOCK I: BASICS OF RE-ENGINEERING**

- UNIT 1      Concept and Requisites of BPR and Flexi System : Nature, Significance and Rationale of Business Process Reengineering (BPR) - Fundamental Rethinking is Fundamental of BPR- The Genesis.
- UNIT 2      Requisites: Reengineering Leader, Reengineering Communications, Reengineering Journey, New Process Design, Reengineering Failure, Reengineering Team, Reengineering Effort.
- UNIT 3      Reengineering Program, Reengineering Will- Speed and Smart Execution- Concept and Significance of Flexibility- Flexible Vs Fixed systems- Features and superiority of Flexible systems.
- UNIT 4      Process Reengineering: Appraisal of Processes - Processes for Reengineering- Reengineering of Processes- Role of information technology.

### **BLOCK II: RE-ENGINEERING REPORTING**

- UNIT 5      BPR Cycle: Identify, Analyze As-Is, Envision New Processes- Business process discovery and diagnosis- Design/Re-design/Reconstruction – Test and Implement- Monitor.
- UNIT 6      Business process interoperability- Business process Improvement- Business process mapping- Process Reengineer- BPR Process and Participants.
- UNIT 7      Implementing BPR: Approval of BPR-Preparations for Implementation- BPR Process Chart- Change Management- Communication, Commitment, Control and Contours.

UNIT 8        Reengineering Reporting- Systems Thinking- Reengineering Enabling Processes- Continuous Improvement- Bottom-up Participation Process- BPR Principles.

### **BLOCK III: TQM CHANGE DYNAMICS**

UNIT 9        Evaluation of PBR: Reengineering Success- Reengineering Revolution- BPR Vs TQM; BPR Vs CQI; BPR Vs Scientific Management;

UNIT 10       BPR Vs Industrial Engineering; BPR Vs Value Engineering- BPR Criticisms- BPR Can do well.

UNIT 11       Types of Functional Flexi systems: Simplifying systems - Enterprise Flexibility: Ready for Experimenting and coping with Paradoxes- Strategic Flexibility: Ready for Change and Dynamics.

### **BLOCK IV: FLEXIBILITY IN BUSINESS EXCELLENCE**

UNIT 12       Organizational Flexibility: Fluidity and Managing by Walking around- Technology Flexibility - Marketing Flexibility - Human Resources Flexibility - Information System Flexibility - Manufacturing system Flexibility - Supply Chain Flexibility.

UNIT 13       Components and Competitiveness of Flexi Systems: Flexibility in Technology- Flexibility in Product offerings- Flexibility in service offerings.

UNIT 14       Flexibility in Business Excellence- Flexibility in Mergers and Acquisitions- Flexibility in Strategic Alliances- Competitive Edge and Flexi Systems.

### **REFERENCES**

10.    Jacobson, et al, Business Process Reengineering With Object Technology, Addison-Wesley, 1994
11.    Clarence Feldmann, The Practical Guide to Business Process ReengineeringDorset House, 1998.
12.    Dan Madison, Process Mapping, Process Improvement & Process Management, Paton

Pres, 2005.

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## **35843 - RELATIONAL DATABASE MANAGEMENT SYSTEMS**

Objective:

- To understand the features and Importance of DBMS
- To gain knowledge on DBMS model

### **BLOCK I: BASICS OF RELATIONAL DATABASE MANAGEMENT SYSTEMS**

- UNIT 1 Database System Applications – Purpose – View of Data– Database Languages – Relational Databases – Database Design – Object based and Semi Structured Databases – Data Storage and Querying – Database Users and Administrators– Transaction Management – Database Architectures – History of Database System.
- UNIT 2 Entity-Relationship Model: E-R model – constraints – E-R diagrams – E-R Design Issues – Weak Entity Sets – Extended E-R features.
- UNIT 3 Relational Database Design: Features of good Relational Designs – Atomic Domains and First Normal Form – Decomposition using Functional Dependencies – Functional Dependency Theory – Decomposition using Functional – Decomposition using Multivalued Dependencies
- UNIT 4 Schema: Introduction -Data Base Schema-Schema and Subschema - manipulative capabilities Guidelines - Different User Interfaces.

### **BLOCK II: DBMS ORACLE DATABASE**

- UNIT 5 DBMS Navigation, Efficiency - DBMS based on the Relational Model: The mapping operation – one to one, one to many and many to many.
- UNIT 6 Data Manipulation facilities - Data Definition facilities - Data Control facilities. Introduction - Meaning- Importance – Implication- Scope-features
- UNIT 7 Introduction to Oracle: Types of Databases, Relational Database properties, Benefits of Oracle, Client/Server Systems
- UNIT 8 Oracle Database Architecture: Overview of Oracle Architecture, Processes, Physical files, Central processing Unit (CPU).

### **BLOCK III: ORACLE QUERIES**

- UNIT 9      Oracle users and structures : Introduction -Network System Tables - Oracle Users, Types of oracle users - Logical Structures.
- UNIT 10     Oracle Fundamentals: Elements of SQL Language: Database Objects, Data Access SQL commands, DML commands
- UNIT 11     Oracle Queries - Basic Query, Using Expressions, Working with NULL values, Joining Multiple Tables in a Query, Selecting Distinct values, Using Subqueries, Unions and Multiple part Queries.

#### **BLOCK IV: SQL STATEMENTS**

- UNIT 12     Table Creation: Create Table statement, Privileges required, Describing Table Definitions, Modifying Tables,
- UNIT 13     Renaming a Table, Copying another table, Dropping a Table - Other Database Objects, Reason for Database Objects, Indexes
- UNIT 14     Embedded SQL: Languages supported by Oracle Precompiler, Embedded SQL statements.

#### **REFERENCE BOOKS:**

1. Naveen Prakash, Introduction to Data Base Management Tata McGraw-Hill Publications, 2006.
2. Database System Concepts – SilberschatzKorthSudarshan, International (6th Edition) McGraw Hill Higher Education, 2011.
3. Jose A.Ramalho – Learn ORACLE 8i BPB Publications 2007
4. David Mcclanahan, Oracle Developers's Guide, Oracle Press, 2005



## **35844- DATA MINING AND WAREHOUSING**

Objective:

- To understand the concept of Data mining
- To know about the knowledge discovery process

### **BLOCK I: BASICS OF DATAMINING AND WAREHOUSING**

- UNIT 1 Data Warehousing Introduction – Definition-Architecture-Warehouse Schema-Warehouse server-OLAP operations. Data Warehouse technology – Hardware and operating system
- UNIT 2 Data Mining - Definition – DM Techniques – current trends in data mining - Different forms of Knowledge – Data selection, cleaning, Integration, Transformation, Reduction and Enrichment.
- UNIT 3 Data: Types of data - Data Quality - Data Preprocessing - Measures of similarity and dissimilarity. Exploration: Summary statistics – Visualization.
- UNIT 4 Association rules: Introduction – Methods to discover association rule – Apriori algorithm Partition Algorithm

### **BLOCK II: DBSCAN, STIRR & ROCK**

- UNIT 5 AR Algorithms: Pincher search algorithm – Dynamic Item set algorithm – FP Tree growth algorithm.
- UNIT 6 Classification: Decision Tree classification – Bayesian Classification – Classification by Back Propagation.
- UNIT 7 Clustering :Introduction – Clustering Paradigms – Partitioning Algorithms – K means & K Mediod algorithms – CLARA – CLARANS – Hierarchical clustering – DBSCAN – BIRCH – Categorical Clustering algorithms – STIRR – ROCK – CACTUS.
- UNIT 8 Introduction to machine learning – Supervised learning – Unsupervised learning – Machine learning and data mining.

### **BLOCK III: VISUAL DATA AND KNOWLEDGE MINING**

- UNIT 9 Neural Networks: Introduction – Use of NN – Working of NN Genetic Algorithm: Introduction –Working of GA.

UNIT 10 Introduction –Web content mining – Web structure mining –Web usage mining  
–Text mining –Text clustering, Temporal mining -Spatial mining

UNIT 11 Visual data mining – Knowledge mining – Various tools and techniques for  
implementation using weka, Rapidminer and Matlab.

#### **BLOCK IV: HADOOP INTRODUCTION AND LIMITATIONS**

UNIT 12 Big Data Introduction: Overview - Characteristics- Types of Big Data-  
Traditional Versus Big Data Approach

UNIT 13 Big data technologies : Introduction - Technologies Available for Big Data –  
Advantages , Disadvantages

UNIT 14 Hadoop – Introduction - What is Hadoop? - Core Hadoop Components -  
Hadoop Ecosystem - Physical Architecture - Hadoop Limitations

#### **REFERENCE BOOKS:**

1. C S R Prabhu, “Data Warehousing – concepts, techniques and applications “, 2nd Edition, Prentice Hall of India, 2002.
2. Jaiwei Han, Micheline Kamber, “Data Mining: Concepts and Techniques”, Harcourt India / Morgan Kauffman publishers, 2008.
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6. Sean Kelly, Data Warehousing in Action, John Wiley, 2003.
7. Sam Anahory, Dennis Murray, Data Warehousing in the real world, Addison Wesley, 2005.

## **35845 - SOFTWARE ENGINEERING**

Objectives:

- To understand the concept of software engineering
- To acquire knowledge on project engineering and tracking

### **BLOCK I: BASICS OF SOFTWARE ENGINEERING**

UNIT 1	Introduction - Software - Software Engineering - Size Factors - Quality and Productive Factors Meaning- Importance – Implication-Scope-features
UNIT 2	Development Process Models - Linear Sequential - Prototyping – Rapid Application Development RAD - Iterative Enhancement - Spiral Model
UNIT 3	Role of Management in Software Development - Introduction - Software Metrics - Process and project metrics.
UNIT 4	Software Project Planning - Estimating software scope, Resources, Meaning-Importance – Implication-Scope-features

### **BLOCK II: QUALITY ASSURANCE**

UNIT 5	Project Estimation - Software Cost Estimation - Cost Factors - Estimation Techniques - Estimating Software maintenance Cost
UNIT 6	Planning an Organizational structure: Introduction – Project planning – Project Structure -Programming Team Structure.
UNIT 7	Project Scheduling and Tracking : Introduction Concept - Defining Task set - Scheduling plan – plan implementation.
UNIT 8	Quality Assurance : Introduction -Planning for Quality Assurance - Quality Standards - Software Configuration Management .

### **BLOCK III: SOFTWARE SPECIFICATIONS**

UNIT 9	Software Risk Management: Introduction - Software Risks - Identification - Projection
UNIT 10	Software Mitigation – Introduction – Software Monitoring and Management – Introduction - Software Reviews.
UNIT 11	Software Requirement Specification - Problem Analysis - Structuring information - Information Flow - Prototyping

### **BLOCK IV: SOFTWARE DESIGN**

UNIT 12	Structured Analysis - Requirement Specification Analysis - Characteristics - Components - Structure - Specification Techniques.
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- UNIT 13      Software Design - Concepts - Principles - Module level concepts - Design methodology - Architectural Design - Transform mapping Design - Interface Design - Interface Design guidelines
- UNIT 14      Procedural Design - Software Testing Methods: Test Case Design - White Box - Basis Path Testing - Control Structure Testing - Block Box Testing - Testing strategies : Unit - Integration - Validation - System.

#### REFERENCE BOOKS:

1.      Roger S. Pressman Software Engineering - A practitioner's Approach McGraw-Hill 6th Edition (2008)
2.      Richard Fairlay Software Engineering Concepts McGraw Hill Book Company (2005)
3.      Pankaj Jalote An Integrated Approach to Software Engineering Narosa Publishing House 3rd Edition(2005)