

**MBA**  
**(SYSTEMS MANAGEMENT)**

Semester

(With Effect from the Academic Year 2013-14)

**ELIGIBILITY FOR ADMISSION**

Candidates who apply for the degree of MBA shall possess the following qualifications.

**(a) AGE LIMIT:**

There is no upper Age Limit.

**(b) QUALIFICATION:**

Any Degree

**3. DURATION OF THE COURSE**

The course will be conducted for Two years under Semester pattern.

On completion of two years, the students will be awarded **MBA with Respective Specialisation.**

**3.1. EXAM** : There will be an examination conducted by the University at the end of each Semester.

**3.2. PASSING MINIMUM** : 50 marks

**3.3. MEDIUM OF INSTRUCTION:** The Medium of instruction will be English.

## LIST OF SUBJECTS AND DETAILED SYLLABUS

SEMESTER	S.No	Title of the Subject
I	1.	Management Theory and Practice
	2.	Organisational Behavior
	3.	Accountancy for Managers
	4.	Managerial Economics
	5.	Statistics for Managers
II	6.	Marketing Management
	7.	Financial Management
	8.	Human Resource Management
	9.	Operations Management
	10.	Research Methods for Business
III	11.	Operations Research
	12.	Strategic Management
	13.	Decision Support System
	14.	Management Information System
	15.	Information Technology for Management
IV	16.	Entrepreneurship
	17.	E-Commerce Technology and Management
	18.	Database Management System
	19.	Software Development
	20.	Enterprise Resource Planning
	21.	Final Project Report

### 21. PROJECT REPORT

Students are required to undertake a Research for in a relevant specialization. They must submit a research report on the relevant specialization guided by the Qualified External Examiner before the end of IV semester. The maximum mark for the research report is 100. The Minimum mark required to pass the Research Report is 50 Percent.

## SEMESTER I

### PAPER 1 MANAGEMENT THEORY AND PRACTICE

**Objectives:** To help students understand Evolution of Management Thought, Concepts, basic functions and recent trends managerial concepts and practices for better business decisions.

**UNIT I:** Evolution of Management thoughts – Contribution of Selected Management Thinkers – Various approaches to management – contemporary management practice – Managing in global environment – Managerial functions.

**UNIT II:** Importance of planning – Types of planning – decision making process – Approaches to decision making – Decision models – Pay off Matrices – Decision trees – Break Even Analysis.

**UNIT III:** Departmentation – Span of Control – Delegation – Centralisation and Decentralisation – Committees – Line and Staff relationships – Recent trends in organisation structures.

**UNIT IV:** Process of Recruitment, Selection, Induction Training – Motivation – Leading – Leadership styles and qualities – Communication – process and barriers.

**UNIT V:** Managements control systems – techniques – Types of control.

### REFERENCES

1. Bateman Snell, Management: Competing in the new era, McGraw-Hill Irwin, 2002.
2. Chandan J.S., Management Concepts and Strategies, Vikas Publishing House, 2002.
3. Hellriegel, Jackson and Slocum, Management: A Competency-Based Approach, South Western, 9th edition, 2002.
4. Koontz, Essentials of Management, Tata McGraw-Hill, 5th Edition, 2001.
5. Stephen P. Robbins and David A. Decenzo, Fundamentals of Management, Pearson Education, Third Edition, 2001.
6. Tim Hannagan, Management Concepts and Practices, Macmillan India Ltd., 1997.

### PAPER II ORGANISATIONAL BEHAVIOUR

**Objectives:** To introduce students to framework that are useful for diagnosing problems involving human behaviour, to increase students understanding of psychological and sociological phenomenon that regularly occur in organizations. To understand the dynamics of human organizations and concepts of individual as well as the group level.

**UNIT I:** Definition, need and importance of organizational behaviour – nature and scope – frame work – organizational behaviour models.

**UNIT II:** Personality – types – factors influencing personality – theories – learning – types of learners – the learning process – learning theories – organizational behaviour modification. Attitudes – characteristics – components – formation – measurement. Perceptions – importance – factors influencing perception – interpersonal perception. Motivation – importance – types – effects on work behavior.

**UNIT III:** Organization structure – formation – groups in organizations – influence – group dynamics – emergence of informal leaders and working norms – group decision making techniques – interpersonal relations – communication – control.

**UNIT IV:** Meaning – importance – leadership styles – theories – leaders Vs managers – sources of power – power centers – power and politics.

**UNIT V :** Organizational climate – factors affecting organizational climate – importance. Job satisfaction – determinants – measurements – influence on behavior. Organizational change – importance – stability Vs change – proactive Vs reactive change – the change process – resistance to change – managing change. Organizational development – characteristics – objectives – team building. Organizational effectiveness – perspective – effectiveness Vs efficiency – approaches – the time dimension – achieving organizational effectiveness.

## **REFERENCES**

1. Hellriegel, Slocum and Woodman, Organisational Behavior, South-Western, Thomson Learning, 9th edition, 2001
2. Stephen P.Robins, Organisational Behavior, Prentice Hall of India, 9th edition, 2001

## **PAPER III ACCOUNTANCY FOR MANAGERS**

**Objectives:** To familiarize the students with basic Accounting concepts and Conventions, to make the students understand Financial Statements, to familiarize with the intricacies of accounting, planning and Management and to make them aware about the tools for decision making.

**UNIT I:** Introduction to Financial, Cost and Management Accounting – Accounting Conventions and Concepts- IFRS-Preparation of financial statements: Income statements and Balance sheet – Segmental Reporting

**UNIT II:** Financial statement analysis – Ratio analysis-Preparation of Cash Flow Statement-cash flow and funds flow statement analysis

**UNIT III:** Elements of Cost - Cost Classification - Cost Control & Cost reduction – Methods of costing - Preparation of cost sheet – Activity based costing.

**UNIT IV:** Basics of Cost Volume Profit (CVP) analysis – BEP analysis- Application of marginal costing in decisionmaking - Basic framework of budgeting-Preparation of Master, flexible and cash budgets- Zero based budgeting

**UNIT V:** Standard costing-Setting standard costs - Analysis of variance - Significance of Computerized Accounting System

## **REFERENCES**

1. Bhattacharyya, Management Accounting,Pearson,2010
2. Khan,Jain,Management Accounting : Text, Problems and Cases Tata McGraw Hill
3. Kuppapally, Accounting for Managers, Prentice Hall of India,2009
4. Maheswari ,Maheswari Accounting for Management Vikas Publishing 2009
5. Pandikumar, Management Accounting-Theory and Practice, Excel Books 2009
6. Vijayakumar, Accounting for Management,Tata McGraw Hill,2009

## **PAPER IV MANAGERIAL ECONOMICS**

**Objectives:** To impart knowledge and understanding to students on managerial economics and their application to business decision making.

**UNIT I:** Meaning and Scope of managerial Economics-Role and Responsibility of A managerial Economist-Fundamentals- concepts - Demand & Supply: Law of Demand-Types of Demand-Elasticity of demand-Demand forecasting, Law of Supply, Elasticity of Supply

**UNIT II :**Macro economic variables – national income, investment, savings, employment, inflation, balance of payment, exchange rate – circular flow of income – national income concepts – measurement of national income – role of economic planning – Indian economic planning.

**UNIT :** Determination of national income – Keynesian perspective - multiplier – accelerator – business cycle – the role of fiscal policy – Indian fiscal policy and experiences. Demand and supply of money – money market equilibrium – the role of money - monetary policy – Indian perspectives.

**UNIT IV:** Analysis of inflation and unemployment – the role of economic policies – Indian experiences.

**UNIT V:** International trade – trade multiplier – linkage model – the role of trade policy – analysis of performance of Indian economy in external sector.

## **REFERENCES**

1. Geetika, Ghosh, Choudhury, Managerial Economics, Tata McGraw Hill 2009
2. Gupta, G.S. Macroeconomics, Theory and Applications, Tata McGraw-Hill
3. Hirschey, Managerial Economics- An integrative Approach, Cengage, 2009
4. Mankar ,Business Economics Macmillan India Ltd 2009

## **PAPER V: STATISTICS FOR MANAGERS**

**Objectives:** To help students understand application of statistics, probability Concepts, basic functions and practical usage for better business decisions.

**UNITI:** Basic definitions and rules for probability, conditional probability, independent of events, Baye's theorem, random variables, Probability distributions: Binomial, Poisson, Uniform and Normal distributions.

**UNIT II** Introduction to sampling distributions, sampling techniques, sampling distribution of mean and proportion, application of central limit theorem. Estimation: Point and Interval estimates for population parameters of large sample and small samples, determining the sample size.

**UNIT III TESTING OF HYPOTHESIS** - Hypothesis testing: one sample and two samples tests for means and proportions of large samples (z-test), one sample and two sample tests for means of small samples (t-test), F-test for two sample standard deviations, Chisquare test for single samples standard deviation. Chi-square tests for independence of attributes and goodness of fit.

**UNIT IV NON-PARAMETRIC METHODS** - Sign test for paired data. Rank sum test: Mann – Whitney U test and Kruskal Wallis test. One sample run test, rank correlation.

**UNIT V CORRELATION, REGRESSION AND TIME SERIES ANALYSIS -**

Correlation analysis, estimation of regression line. Time series analysis: Variations in time series, trend analysis, cyclical variations, seasonal variations and irregular variations.

**REFERENCES**

1. Aczel A.D. and Sounderpandian J., “Complete Business Statistics”, Tata McGrawHill
2. Levin R.I. and Rubin D.S., “Statistics for management”, Prentice Hall of India

**SEMESTER II**

**PAPER I MARKETING MANAGEMENT**

**Objectives:** It helps students to understand the basic concepts of Marketing Management, understand various marketing tools/models for solving marketing problems and to comprehend various situations and marketing terminologies.

**UNIT I:** Marketing conceptual frame work – marketing environment – customer oriented organization – marketing interface with other functional areas, marketing in a globalized environment.

**UNIT II:** Understanding Industrial and individual buyer behavior – influencing factors– responding to buyer behaviour – building customer satisfaction – marketing to organizations and marketing of services Market segmentation – targeting and positioning, developing marketing mix,

**UNIT III:** Product planning and development – product life cycle – brand management, developing new product -Pricing decisions – channel design and management – retailing and wholesaling – promotion methods. Advertisement and personal selling, public relations.

**UNIT IV:** Marketing Research- Types, process – tools and techniques – application of marketing research – product launching, demand estimation, advertising, brand preferences, customer satisfaction, retail stores image, customer perception, distribution, customer relationship, competitor analysis and related aspects

**UNIT V:** Online marketing – web based marketing programmes – emerging now trends and challenges to marketers.

## **REFERENCES**

1. Aakar Day, Kumar, Essential of Marketing Research.
2. Boyd Walker, Marketing Management, McGraw Hill, 2002.
3. Keith Flether, Marketing Management and Information Technology Prentice Hall, 1998
4. Phlip Kortler: Marketing management (Millenium edidtion), Prentice hall of India.
5. Zikmand d' Amico, Marketing South western, Thomson Learning, 2000.

## **PAPER II FINANCIAL MANAGEMENT**

**Objectives:** Imbibing knowledge about the decisions and decision variables involved in building the asset side of balance sheet of the firm and developing the analytical skills by associating the tools and techniques with the situation and to develop skills for interpretation business information and application of financial theory in corporate investment decisions.

**UNIT I:** Financial management – An overview, time value of money. Introduction to the concept of risk and return of a single asset and of a portfolio, valuation of bonds and shares option valuation.

**UNIT II:** Capital Budgeting: Principles and techniques, Nature of capital budgeting, Identifying relevant cash flows, Evaluation Techniques, Payback, Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index, Comparison of DCF techniques, Project selection under capital rationing, Inflation and capital budgeting. Concept and measurement of cost of capital, Specific costs and overall cost of capital.

**UNIT III:** Financial and operating leverage, capital structure, Cost of capital and revaluation, designing capital structure. Dividend policy, Aspects of dividend policy, practical consideration, forms of dividend policy, practical considerations, forms of dividends, share splits.

**UNIT IV:** Principles of working capital: Concepts, need; Determinants, issues and estimation of working capital, Accounts Receivables Management and factoring, Inventory management, Cash management, Working capital finance, Trade credit, Bank finance and Commercial paper.

**UNIT V:** Indian capital and stock market, New issues market. Long term finance: Shares debentures and term loans, lease, hire purchase, project financing, venture capital financing.



## REFERENCES

- 1.. Khan M.Y and.Jain P.K, Financial Management, Text, Problems and Cases - Tata McGraw
2. Pandey I.M , Financial Management, Vikas Publishing House Pvt. Ltd.,

## PAPER III HUMAN RESOURCE MANAGEMENT

**Objectives:** To provide the future manager with inputs with a view to Enhancing the appreciation of the Human Resources function as a potential career option, Understanding the interface of the Human Resources function with Operations, Marketing, and Finance functions

**UNIT I :** Human Resource Philosophy - Changing environments of HRM - Strategic human resource management - Using HRM to attain competitive advantage - Trends in HRM - Organisation of HR departments - Line and staff functions - Role of HR Managers.

**UNIT II:** Employment planning and forecasting – Recruitment, selection process- Building employee commitment : Promotion from within – Sources- Induction.

**UNIT III :** Orientation & Training : Orienting the employees, the training process, need analysis, Training -techniques, Developing Managers : Management Development - On-the-job and off-the-job Development techniques using HR to build a responsive organisation.

Management Developments - Performance appraisal in practice. Managing careers : Career planning and development - Managing promotions and transfers.

**UNIT IV :** Establishing Pay plans : Basics of compensation - factors determining pay rate - Current trends in compensation - Job evaluation – Incentives- Practices in Indian organisations. Statutory benefits - non-statutory (voluntary) benefits - Insurance benefits - retirement benefits and other welfare measures to build employee commitment.

**UNIT V :** Labour relations -Employee security - Industrial relation-Collective bargaining : future of trade unionism. Discipline administration - grievances handling - managing dismissals and separation. Labour Welfare : Importance & Implications of labour legislations - Employee health - Auditing -Future of HRM function.

## REFERENCES

1. Gary Dessler, "Human Resource Management", Seventh edition, Prentice-Hall of India
2. Venkatapathy R.& Assissi Menacheri, Industrial Relations & Labour Welfare, Adithya Publications, CBE, 2001.
3. VSP Roa, Human Resource Management : Text and cases, First edition, Excel Books,

## **PAPER IV OPERATIONS MANAGEMENT**

**Objectives:** To understand the concepts of Operation Management and its applications in industrial situations and to familiarize the students with various concepts of Operation Planning and Management.

**UNIT I** Production and Operations Management (POM) – Need, History, System, Types, functions and communication in POM. Computer Integrated Manufacturing and Services Systems. Global /trade operations and supply network applications.

**UNIT II:** Facility Location Decisions (FLcD) – Selections of country, region and site. Facility Layout Decision (FlyD) – Types (Fixed Position, and Production, Process, Flexible), Methodologies (Distance Minimising, Computer software systems (CRAFT, CORELAP, ALDEP),

**UNIT III:** Forecasting – Types, Methods (Qualitative and Quantitative), Types of variation in data, Minimising forecasting errors and selection of forecasting methods. Capacity Planning- MRP and MRP II systems Introduction to ERP Line Balancing and performance ratios,

**UNIT IV:** Material Management (MM) – Handling Technology (Robots, Automated storage and retrieval systems (ASRS) and methods (JIT, / Kanban, ABC Systems).Independent Demand Inventory Models – Fixed order system, Basic EOQ, EBQ Models, Quantity discount models. Dependent Demand Inventory models

**UNIT V:** Johnson’s Algorithm for job sequencing -Use of Gantt charts, Queuing analysis and Critical Ratios as methods for job scheduling. work measurement methods (WM) - Time study, methods-time measurement, Work Sampling, White color measurement and learning curves, Using WM to increase productivity- PERT / CPM – Drawing the network, computation of processing time, floats and critical path. Resource leveling techniques.

### **REFERENCES**

1. Paneer Selvam R., Production and Operations Management, Prentice Hall of India.
2. Sang M Lee and Marc J Schniederjans, Operation Management, All India Publishers

## **PAPER V RESEARCH METHODS FOR BUSINESS**

**Objectives:** To impart knowledge to evaluate and conduct research on management problems/issues, to provide skills necessary for the conduct of student research projects as a part of the programme requirement and to highlight importance of research in management

**UNIT I:** Business Research – Definition and Significance – the research process – Types of Research – Research questions / Problems – Research objectives – Research hypotheses – characteristics – Research in an evolutionary perspective – the role of theory in research.

**UNIT II:** Research Process- Research design – Definition – types of research design – exploratory and causal research design – Descriptive and experimental design – different types of experimental design – Validity of findings – internal and external validity – Variables in Research – Measurement and scaling – Different scales – Construction of instrument – Validity and Reliability of instrument.

**UNIT III:** Types of data – Primary Vs Secondary data – Methods of primary data collection – Survey Vs Observation – Experiments – Construction of questionnaire and instrument – Validation of questionnaire – Sampling plan – Sample size – determinants optimal sample size – sampling techniques – Probability Vs Non-probability sampling methods.

**UNIT IV:** Data Preparation – editing – Coding – Data entry – Validity of data – Qualitative Vs Quantitative data analyses – Bivariate and Multivariate statistical techniques – Factor Analysis - multiple regression and correlation – Application of statistical software for data analysis.

**UNIT V** Research report – Different types – Contents of report – need of executive summary – chapterization – contents of chapter – report writing – the role of audience – readability – comprehension – report format – title of the report – ethics in research – ethical behaviour of research

## **REFERENCES**

1. Alan Bryman and Emma Bell, Business Research methods, OUP.
2. Cooper and Pamela Business Research methods , Tata Mc Graw Hill, 2006.
3. Uma Sekaran, Research methods for Business, Wiley India, New Delhi, 2006.

## **SEMESTER III**

### **PAPER I OPERATIONS RESEARCH**

**Objectives:** To provide a formal quantitative approach to problem solving and an intuition about situations where such an approach is appropriate, to introduce some widely-used mathematical models. The understanding of these models will allow the students to communicate with persons who run them and to evaluate the results they present and to provide a tool that the students can use to solve management problems.

**UNIT I:** Introduction to applications of operations research in functional areas of management.

Linear programming- Formulation, Solution by graphical and simplex methods, Special cases, Dual simplex method, Principles of duality, Sensitivity analysis.

**UNIT II:** Transportation models (minimizing and maximizing cases) –Balanced and unbalanced cases –Initial basic feasible solution by N-W corner rule, least cost and Vogel’s approximation methods. Check for optimality. Solution by MODI /Stepping stone method. Cases of degeneracy. Transshipment models.

**UNIT III:** Solution to pure and mixed integer programming problem by Branch and bound and cutting plane algorithms. Game theory-Two person zero sum games-saddle point, Dominance Rule, Convex Linear combination (averages), methods of matrices, graphical and LP solutions.

**UNIT IV:** Dynamic programming (DP) – Deterministic cases – Maximizing and minimizing problems. DP techniques for LP problems. Decision making under risk – Decision trees – Decision making under uncertainty. Application of simulation techniques for decision making.

**UNIT V QUEUING THEORY AND REPLACEMENT MODELS** -Queuing theory – single and multi-channel models – Infinite number of customers and infinite calling source. Replacement models –Individual replacement models (with and without time value of money) – Group replacement models.

## **REFERENCES**

1. Paneerselvam R., Operations Research, Prentice Hall of India,
2. Toha, “Operations Research”, Tata Mc Graw Hill

## **PAPER II STRATEGIC MANAGEMENT**

**Objectives:** The Objective of the course is to enable students have a grasp of various business strategies in general and functional management areas. It will provide a strategic orientation in conduct of the business.

**UNIT I:** Conceptual framework for strategic management, the Concept of Strategy and the Strategy Formation Process – Stakeholders in business – Vision, Mission and Purpose – Business definition, Objectives and Goals - Corporate Governance and Social responsibility

**UNIT II** External Environment - Environmental Threat and Opportunity Profile (ETOP) – SWOT- Porter’s Five Forces Model-Strategic Groups Competitive Changes during Industry Evolution- Globalisation and Industry Structure - National Context and Competitive advantage Resources- Avoiding failures and sustaining competitive advantage-

**UNIT III** The generic strategic alternatives – Stability, Expansion, Retrenchment and Combination strategies - Business level strategy- Strategic analysis and choice -OCP - Strategic Advantage Profile - Corporate Portfolio Analysis - SWOT Analysis - GAP Analysis - Mc

Kinsey's 7s Framework - GE 9 Cell Model - Distinctive competitiveness - Selection of matrix - Balance Score Card

**UNIT IV :** The implementation process, Resource allocation, Designing organisational structure-Designing Strategic Control Systems- Matching structure and control to strategy-Implementing Strategic change-Politics-Power and Conflict-Techniques of strategic evaluation & control

**UNIT V:** Managing Technology and Innovation- Strategic issues for Non Profit organizations- New Business Models and strategies for Internet Economy

## **REFERENCES**

1. Azhar Kazmi, Strategic Management & Business Policy, Tata McGraw Hill, Third Edition
2. Thomas L. Wheelen, J.David Hunger and Krish Rangarajan, Strategic Management and Business policy, Pearson Education., 2006

## **PAPER III DECISION SUPPORT SYSTEM**

### **Course Objective**

The objective of this course is to bring about an understanding of the significance, structural framework and functional performance of decision support systems. It also exposes the students to the relevance of understanding user requirements and the implementation issues.

### **UNIT I**

Decision Concept-steps-Decision Support System-Components-Characteristics-Classification & Application.

### **UNIT II**

Models – Modeling Process – Types of Models – Optimisation – Simulation – Heuristic – Descriptive – Predictive – Model base – Modeling Languages – Model Directory – Model Base Management System – Model Execution, Integration and command processing – Model Packages.

### **UNIT III**

Database – Sources of Data – Data Directory – Data Structure and Database - Languages – Query Facility – Data Management System – DBMS as DSS Development Tool.

### **UNIT IV**

User Interface – Graphics – Multimedia – Visual Interactive Modeling – Natural Language Processing – Speech Recognition and understanding – Issues in user interface.

## **UNIT V**

Development process – Software and Hardware and Data Acquisition – Model Acquisition – Dialog Development – Integration – Testing and Validation – Training and Implementation.

## **REFERENCES**

1. Efraim turban and Jay E Aronson, Decision Support Systems and Intelligent Systems, Prentice Hall of India, 1998.
2. Janakiraman V.S. and Sarukesi. K., Decision Support Systems', Prentice Hall of India, 1999.
3. Lofti, Decision Support System and Management, McGraw Hill Inc., International Edition, New Delhi, 1996.
4. Marakas, 'Decision Support System', Prentice Hall International Paper back Edition, 1998.

## **PAPER IV: MANAGEMENT INFORMATION SYSTEM**

**Objectives:** Make the students to understand the interface of the Human Resources function with Operations, Marketing, and Finance functions and to impart knowledge on information systems and its relevance to business decisions.

**UNIT I :** Human Resource Philosophy - Changing environments of HRM - Strategic human resource management - Using HRM to attain competitive advantage - Trends in HRM - Organisation of HR departments - Line and staff functions - Role of HR Managers.

**UNIT II:** Employment planning and forecasting – Recruitment, selection process- Sources- Induction-Orientation & Training - Management Development - On-the-job and off-the-job- Management Developments - Performance appraisal in practice. Managing careers : Career planning and development - Managing promotions and transfers.

**Unit III :** Establishing Pay plans : Basics of compensation - factors determining pay rate - Statutory benefits - non-statutory (voluntary) benefits - Labour relations - Industrial relation- Discipline administration - grievances handling - managing dismissals and separation.

**UNIT IV:** Foundations of Information Systems: A framework for business users - Roles of Information systems - System concepts - Organisation as a system - Components of Information Systems - IS Activities - Types of IS-HRIS: Function, Usage and Application.

**UNIT V:** DSS: DSS models and software: The decision making process - Structured, Semi Structured and Unstructured problems; Managing Information Technology: Managing Information Resources and technologies - Security and Ethical Challenges: IS controls - facility control and procedural control

## **References**

1. Gary Dessler, "Human Resource Management", Seventh edition, Prentice-Hall of India
2. James A O'Brien, "Management Information Systems", Tata McGraw Hill.
3. VSP Rao, Human Resource Management : Text and cases, First edition, Excel Books
4. Waman S Jawadekar , "Management Information System Text and cases", TMH

## **PAPER V: INFORMATION TECHNOLOGY FOR MANAGEMENT**

### **Course Objective**

This course aims at highlighting the significance of role of information technology in enhancing the managerial performance. It also exposes the students to the technical aspects and business applications of information technology.

### **UNIT I**

Managing in Information Age - Evolution of IT Management – Types of Information Systems – Internet Based Business Systems – Value Chain Reconstruction for E-Business – IT Management Challenges and issues – Critical success Factors for IT Managers.

### **UNIT II**

Computing Hierarchy – Input – Output Technologies – Hardware Issues – System Architecture – Operating Systems – Network Operating Systems – Grid Computing – Mobile Computing – Ubiquitous Computing – Application Programming – Managing Application Development – Data Resources – Managing Data Resources – Problem of Change and Recovery.

### **UNIT III**

Communication Technology – WWW – Intranets – Extranets – Voice Networks Data Communication Networks – Last Mile – Wireless System – Web Hosting – Application Service Providers.

### **UNIT IV**

IT Applications - Enterprise System – Expert System – Decision Support System – Neural Networks – Executive Information System – Customer Relationship Management System – Supply Chain Management Systems – Knowledge Management – Data Warehousing – Data Mining – Virtual Reality – Enterprise Resource Planning – E-Business and Alternatives. E-Business Expectations and Customer Satisfaction.

## **UNIT V**

IT Strategy Statements – Planning Models for IT Managers Legislation and Industry Trends. Independent Operations – Headquarters Driver – Intellectual Synergy – Integrated Global IT – IT investment – Estimating Returns – IT Value Equation – Pricing Frame work – Hardware and Software Buying – Factors of IT Management – Implementation Control – Security – Quality - Ethical Issues

## **REFERENCE**

1. Efraim Turban, R. Kelly Rainer Jr, Richard E. Potter, Introduction to Information Technology, John Wiley & Sons, (Asia) Pvt. Ltd. Singapore, 2004.
2. Garroll W. Frenzel Johne. Frenzel, Management of Information, Technology, Thomson Course Technology, Boston, 2004.
3. Henry C. Lucas. Jr, Information Technology – Strategic Decision Making for Managers, John Wiley & Sons (Asia) Pvt. Ltd., Singapore, 2005.

## **SEMESTER IV**

### **PAPER I : ENTREPRENEURSHIP**

**Objectives:** To enable the students have entrepreneurial motivation by providing the basic idea of entrepreneurship, business ideas, project writing and new venture creation

**UNIT I:** Entrepreneurship concept – Entrepreneurship as a Career – Entrepreneurial Personality - Characteristics of Successful, Entrepreneur – Knowledge and Skills of Entrepreneur.

**UNIT II:** Business Environment - Role of Family and Society - Entrepreneurship Development Training and Other Support Organisational Services - Central and State Government Industrial Policies and Regulations - International Business.



**UNIT III :** Business Idea- Idea generating Techniques- Sources of Product for Business - Prefeasibility Study - Criteria for Selection of Product - Ownership - Capital - Budgeting Project Profile Preparation - Matching Entrepreneur with the Project - Feasibility Report Preparation and Evaluation Criteria- Venture Creation.

**UNIT IV:** Finance and Human Resource Mobilization Operations Planning - Market and Channel Selection - Growth Strategies - Product Launching- Role of Venture Capitalists and Angel Investors in promoting entrepreneurship.

**UNIT V:** Monitoring and Evaluation of Business - Preventing Sickness and Rehabilitation of Business Units- Effective Management of small Business.

## **REFERENCES**

1. Hisrich, Entrepreneurship, Tata McGraw Hill, New Delhi, 2001.
2. Khanka S.S., Entrepreneurial Development, S.Chand and Company Limited
3. Mathew Manimala, Entrepreneurship Theory at the Crossroads, Paradigms & Praxis, Biztrantra ,2nd Edition ,2005

## **PAPER II: E-COMMERCE TECHNOLOGY AND MANAGEMENT**

### **Course Objective**

The objective of this course is to enhance the understanding of the students about the technical and managerial aspects of E-Commerce. the scope, significance and technical aspects of database management system. The students are also exposed to the organisational requirements and legal and ethical implications of E-Commerce,.

### **UNIT – I**

Electronic commerce and physical commerce - Economic forces – advantages – myths – business models.

### **UNIT – II**

Internet and World Wide Web, internet protocols - FTP, intranet and extranet - cryptography, information publishing technology- basics of web server hardware and software.

### **UNIT – III**

Consumer oriented ecommerce – e-tailing - models - Marketing on web – advertising, e-mail marketing, e-CRM; Business oriented ecommerce – E-Government, EDI on the internet –SCM - Web Auctions - Virtual communities - Web portals

### **UNIT – IV**

E payments - Characteristics of payment of systems, protocols, E-cash, E- cheque - Micro payment systems.

### **UNIT – V**

Legal, Ethics and privacy issues in E-Commerce – Protection needs and methodology – consumer protection - cyber laws - contracts and warranties . Taxation and encryption policies.

### **REFERENCES**

1. Bharat Bhasker, Electronic Commerce – Frame work technologies and Applications, 3<sup>rd</sup> Edition. Tata McGrawHill Publications, 2008.
2. Efraim Turban et al, Electronic Commerce –A managerial perspective, Pearson Education Asia, 2006.
3. Gary P. Schneider, Electronic commerce, Thomson course technology, Fourth annual edition, 2007
4. Hentry Chan & el , E-Commerce – fundamentals and Applications, Wiley India Pvt Ltd,2007.
5. Kalakota et al, Frontiers of Electronic Commerce, Addison Wesley, 2004
6. Kamlesh K.Bajaj and Debjani Nag, Ecommerce- the cutting edge of Business, Tata McGrawHill Publications, 2008

### **PAPER III: DATABASE MANAGEMENT SYSTEM Course Objective**

This course aims to enable students to understand the scope, significance and technical aspects of database management system. It also exposes the students to the functional implications and the corporate requirements of database management.

#### **UNIT – I**

Database and Database Management – characteristics – importance –functions - advantages – Database Management System - evolution – database architecture data organization- file structure and indexing

#### **UNIT – II**

Data models- Conceptual design- ER diagram-relationships- normalization -data management and system integration

### **UNIT – III**

Query languages-SQL for data creation, retrieval and manipulation, database transactions, concurrency control, atomicity, recovery, security, backup and recovery, data base administration- client server architecture based RDBMS.

### **UNIT – IV**

Concepts of distributed databases and design, Object oriented databases-object life cycle modeling conceptual design-UML.

### **UNIT – V**

Overview of visual databases and knowledge based databases-conceptual design and business Impacts – Significance of certifications such as Oracle Certified Professional.

### **REFERENCES**

1. Hector Garcia -Molica et al, Database Systems – The complete book, Pearson Education, 2008
2. Jain V. K., Database Management Systems, Dreamtech press, 2007
3. Jeffrey A Hoffer et al, Modern Database Management, 8th Edition, Pearson Education,2008,
4. Mark L.Gillenson & el, Introduction database management, Wiley India Pvt. Ltd, 2008
5. Narayan S. Umanath and Richard W. Scamell, Data Modeling and database design, Thomson course technology, 2008
6. Peter Rob and Carlos Coronel, Database systems- Design, Implementation and Management, Thomson Course technology, 2008
7. Peter Rob, Carlos Coronel, Database System and Design, Implementation and Management, 7 th edition, Cengage Learning,

## **PAPER IV: SOFTWARE DEVELOPMENT**

### **Course Objective**

This course aims to enable students to understand the technical process and managerial significance of software development. It also exposes the students to the functional implications and the human factors associated with developing and maintaining software.

### **UNIT I**

Overview of software development life cycles –Challenges – Software engineering Process - paradigms – Comparison between Process and Product –Metrics – Software project management – Planning – estimation – Risk analysis – Software project scheduling

### **UNIT II**

Requirement Analysis – Definition – Specification - tools – Formal Specification – Prototyping Specification – Analysis modelling

### **UNIT III**

Software design – Abstraction – Modularity – Software Architecture – Effective modular design - Cohesion and Coupling – Architectural design – Procedural design – Data flow oriented design – Object Oriented design

### **UNIT IV**

User interface design – Human factors – Human computer interaction – Interface standards - Fundamentals of coding – code documentation – code efficiency – Software Configuration Management

### **UNIT V**

Software Quality Assurance – Review, Walkthrough and inspection- Quality metrics – Software Reliability – testing – Path testing – Control Structures testing – Black Box testing – Integration, Validation and system testing – Reliability models for Software quality - Software Maintenance

### **REFERENCES**

1. Ali Behforooz and Frederick J. Hudson, ‘Software Engineering Fundamentals, Oxford publications.
2. Carlo Ghezzi, Mehdi Jazayari, Dino Mandrioli, ‘Fundamentals of Software Engineering, Prentice Hall of India, 1991.
3. Pfleeger, ‘Software Engineering’, Prentice Hall, 1999.
4. Richard Fairley, ‘Software Engineering’, II Edition, Tata McGraw Hill, New Delhi.
5. Roger Pressman. S., ‘Software Engineering’, A Practitioner’s Approach, Tata McGraw Hill, New Delhi.
6. Sommerville I. , ‘Software Engineering, V Edition, Adison Wesley, 1996.

### **PAPER V: ENTERPRISE RESOURCE PLANNING**

#### **Course Objective**

This course aims to enhance the understanding of the students with respect to the conceptual framework and the technological infrastructure of Enterprise Resource Planning. It also aims to expose the students to the implementation issues and future trends associated with ERP.

#### **UNIT – I**

Overview of enterprise systems – Evolution - Risks and benefits - Fundamental technology - Issues to be consider in planning design and implementation of cross functional integrated ERP systems.

#### **UNIT – II**

Overview of ERP software solutions- Small medium and large enterprise vendor solutions – Business Process Reengineering - Business Engineering and best Business practices - Business

process Management- Overview of modules -sales and Marketing, Accounting and Finance, Materials and Production management

### **UNIT – III**

Planning Evaluation and selection of ERP systems-Implementation life cycle - ERP Implementation - Methodology and Frame work- Training – Data Migration - People and Organization in implementation-Consultants, Vendors and Employees.

### **UNIT – IV**

Maintenance of ERP- Organizational and Industrial impact - Success and Failure factors of ERP Implementation -case studies.

### **UNIT – V**

Extended ERP systems – Customer Relationship Management – Supply Chain Management - Business Analytics - Future trends in ERP systems-web enabled Wireless technologies

### **REFERENCES**

1. Alexis Leon, Enterprise Resource Planning, second edition, Tata McGraw-Hill, 2008.
2. Alexis Leon, ERP demystified, second Edition Tata McGraw-Hill, 2006.
3. Jagan Nathan Vaman, ERP in Practice, Tata McGraw-Hill, 2008
4. Mahadeo Jaiswal and Ganesh Vanapalli, ERP Macmillan India, 2006.
5. Summer, Enterprise Resource Planning, Pearson Education, 2008.
6. Vinod Kumar Grag and N.K. Venkitakrishnan, ERP- Concepts and Practice, Prentice -Hall of India, 2006.