## MASTER OF BUSINESS ADMINISTRATION

(E- Commerce)

## **SYLLABUS**



2023-2025

Faculty of Management Studies MohanlalSukhadia
University UDAIPUR (RAJ.)

#### THE PROGRAMME

The Master of Business Administration (E Commerce) is a two-year full-time program. The course structure and program administration are as follows:

#### **COURSE STRUCTURE**

1. Core courses (CC): A, B, and C denote three different disciplines (subjects). A student will study 4

papers in each discipline.

- 2. Discipline Specific Elective (DSE): A student will choose DSE courses from the three chosen disciplines (A, B, and C) for semesters V and VI. Any such paper can be Generic Elective Course (GEC) for the students of other disciplines.
- 3. Ability Enhancement Compulsory Courses (AECC): Modern Indian Languages (MIL), English, Hindi Communication (Odia/Hindi/Telugu/Bangla/.....)
- 4. Skill Enhancement Courses (SEC): Communicative English in the 3rd semester and three more subjects from a common pool. Each discipline provide at least one SEC
- 5. Courses with Practical component: Theory (4 credits) + Practical (2 credits) = 6 credits
- 6. Non-practical Courses: Theory (5 credits) + Tutorial (1 credit) = 6 credits (Numbers shown in brackets indicate Credits). In some of the disciplines it can be (2L+2P+2T) or (2L+4P)
- 1. Discipline Specific Elective (DSE): In this table four electives are proposed for each given DSE/GECcourse (in the parentheses note the 4 options of each elective i.e. 1-4, or 5-8 or 13-16 etc). Currently, at least two i.e. the first two are to be proposed in each of the ten DSE/GEC courses. Two additional numbers are reserved for two more electives which may be proposed in future.
- 2. A DSE course opted by a student from his/her parent Department, will be the DSE for him/her. Else the course will be the GEC.
- 3. A student can opt 2-3 GEC which are under the DSE courses of other faculty.
- 4. Wherever there are only theory papers the courses can be of either 6 or 4 credits only. In case of 6 credit for each course, the number of courses given in above table will reduce accordingly.
- 5. In some of the disciplines, it can be (2L+2P+2T) or (2L+4P). The programme has been organized in two years-First Year and Second Year, each year comprising two semesters. The list of papers offered during First Year and Second Year of the programme shall be as follows:

Table : CBCS Course structure for M.B.A E-COMMERCE (Two Year Program), Total credits 96							
	SEM-I	SEM-II	SEM-III	SEM- IV			
Core Courses	DCC-1-(Management practices and Organization Behaviour)Th (4 Cr) DCC-2 (Managerial Economics) Th (4 Cr) DCC-3 (Marketing Management)Th (4 Cr) DCC-4 (Research Methodology)Th (4 Cr) DCC-1 (Accouting for managers)Th/Practical (4 Cr) DCC-2 (Statistical Methods)Th/Practical (4 Cr)	DCC-5-(Human Resource Management )Th (4 Cr) DCC-6 (Managerial Skill Development ) ( Th (4 Cr) DCC-7 (Production and Operation Management )(Th (4 Cr) DCC-3( Financial Management)Th//Practical (4 Cr) DCC-4 (Quantitative Methods)Th/Practical (4 Cr)	DCC-8 DSS and MIS Th (4 Cr) DCC-9 (Business Policy &Strategic Management) Th (4 Cr)	DCC-10- (Business Legislation) Th (4 Cr)			
Discipline Specific Elective/ Generic Elective Courses		GEC-(1-4) Th (4 Cr) Fundamentals of E- Commerce E-Commerce Progression Managerial Communication Information and Network Security	DSE-(5-8) Th (4 Cr) E-advertising Knowledge Management System (KMS) Public Relations and Corporate Communications Database Management System DSE-(9-12) Th (4 Cr) Managing E Channels Introduction to Data Science Digital Business Warehouse Management & Data Mining DSE-(1-4) Th/Practical (4 Cr) Summer Training Project Report E- Business Philosophy Internet Programming for e-Business/ e- Commerce Business	DSE-(13-16) Th (4 Cr) Digital Marketing Retailing Analytics Competency Based Human Resource Management System DSE-(17-20) Th (4 Cr) E - Commerce: Application and Securities E- Business Technologies & Trends Business Process Reengineering Integrated Marketing Communication DSE-(21-24) Th (4 Cr) Introduction to Wordpress Development Business Intelligence Emotional Intelligence Emotional Intelligence Big Data AnalyticsDSE-(9- 12) Th/Practical (4 Cr) Technology Management			

24+0=24 20+4=24 8+16= 4+20= 24 24	24+0=24	20+4=24	Analytics GEC-(5-8) Th/Practical (4 Cr) Entrepreneurship Development Marketing Analytics HR Analytics Basic Business Analytics Using R	Product Photography for e- commerce Businesses in emerging markets Programming Lab DSE-(13-16) Th/Practical (4 Cr) SEO Training Social Media Marketing Financial Analytics Major Research Project/ Live Project
56(DCC)+40(DSE/GEC)=96			24	

NOTE: DSE PAPERS TO BE STARTED IN THE SESSION IS TO BE DECLARED BY THE COURSE DIRECTOR/ DIRECTOR.

## NEP DCC courses syllabus

# DCC – 1 MANAGEMENT PROCESS AND ORGANIZATIONALBEHAVIOUR Th (4 cr)

## Objectives

The objectives of this paper are to familiarize the student with basic management concepts and behavioural processes in the organization.

#### **Course Contents**

#### Unit -I

Evolution of management thought, Systems and contingency approach for understanding organizations, managerial processes, functions, skills and roles in an organization; Social Responsibility of Business; Leadership: Concept, Nature, Importance, Attributes of a leader, developing le aders across the organization, Leadership Grid. Decision making: Concept, Nature, Importance, and Process. Types of decisions. Problems in decision making

#### Unit-II

Introduction to Organizational Behavior: Definition, Importance, Scope, Fundamental Concepts of OB, Different models of OB - autocratic, custodial, supportive, collegial and SOBC.. Personality & Attitudes: Meaning of personality, attitude - Development of personality - Attributes of personality- Transactional Analysis - Ego states - Johari window - Nature and dimensions of attitude - Developing the right attitude

#### Unit-III

Motivation: Definition, Importance, Motives – Characteristics, Classification of motives - Primary & Secondary motives. Theories of Motivation - Maslow's Theory of need hierarchy - Herzberg' s theory. Morale - Definition and relationship with productivity - Morale Indicators.

#### Unit-IV

Group Dynamics and Team building: Concept of Group & Team. Theories of Group Formation - Formal and Informal Groups. Importance of Team building. . Conflict Management: Definition. Traditional vis - à-

visModern view of conflict – Types of conflict – Intrapersonal, Interpersonal, and Organizational. Constructive and Destructive conflict.Conflict management.

#### Unit-V

Stress management: Definition, Causes, Managing stress, Stress as a motivator. Work life balance. Applications of emotional intelligence in organizations, communication, group decision making, Understanding and Managing organizational system - Organizational design and structure, change management: Concept of change, change as a natural process, Importance & Causes of change - social, economic, technological, organizational. Learning - unlearning, Concept of learning organizations.

#### Suggested Readings

1. Koontz, H and Wechrich, H. Management. 10th ed., New York, McGraw Hill. 1995.

Luthans, F. Organizational Behaviour.7th ed., New York, McGraw Hill, 1995.

Robbins, S P. Management. 5th ed., New Jersey, Englewood Cliffs, Prentice Hall Inc., 1996.

Robbins, S P. Organizational Behaviour.7th ed., New Delhi, Prentice Hall of India, 1996.

Singh, Dalip Emotional Intelligence at Work, Response Books, Sage Publications, Delhi, 2001

Staw, B M. Psychological Dimensions of Organizational Behaviour.

2nd Ed., Englowed Cliffs, New Jersey, Prentice Hall Inc., 1995.

Stoner, J. etc. Management.6th ed., New Delhi, Prentice Hall of India, 1996.

# DCC-2 (Managerial Economics) Th (4 Cr) Objectives

The Objectives of this course is to acquaint the participants with concepts and techniques used in Micro-Economic Theory and to enable them to apply this knowledge in business decision-making. Emphasis is given to changes in the nature of business firms in the context of globalization.

#### **Course Contents**

- Scope, Concepts and Techniques of Managerial Economics; Nature of business decision- making; Marginal analysis, optimization; Demand functions; Law of Demand - Utility Concept, Cardinal and Ordina l Approach, Income and substitution effects.
- 2 Elasticity of Demand- Price Elasticity, Income Elasticity, Cross Elasticity, Advertising Elasticity; Demand forecasting; concept of consumer surplus.
- 3. Production Function- Concept, Isoquants, Equilibrium, Law of Variable Proportions; Law of Returns to Scale; Economies of scale; Cost Function- Types of Costs, Theory of Firm - Profit Maximization, Sales Maximization; Revenue curves- TR, AR, MR, Long run and Short run
- 4 Market Structure: Concept of Equilibrium, Perfect Competition, Monopoly, Monopolistic, Oligopoly: Kinked Demand curve, Game theory, Price leadership model, Full cost Pricing Theory, ,Baumel's theory of sales revenue maximization, Williamson's Managerial Discretionary, Theory of Firm, Cyert& March Behavioral Theory of Firm.; Theoretical Concept of Pricing, Pricing Polices in Practices; Non- Price Competition.
- 5. Macro Economics: Aggregates and Concepts, Aggregate Consumption-Aggregate Demand; Concept and Measurement of National Income; Determination of National Income, Multiplier Effect & Accelerator; GNP and GDP; Balance of Payments; Monetary Policy; Fi scal Policy; Business cycle.

- 1. Adhikary, M. Business Economics., New Delhi, Excel Books, 2000.
- 2. Baumol, W J. Economic Theory and Operations Analysis. 3rd ed., New Delhi, Prentice Hall Inc., 1996.
- 3. Chopra, 0.P. Managerial Economics. New Delhi Tata McGraw Hill 1985.
- 4. Keat, Paul G & Philips K. Y. Young, Managerial Economics, Prentice

Hail, New Jersey, 1996.

## DCC-3 (Marketing Management)Th (4 Cr)

## **Objectives**

The purpose of this course is to develop and understanding of the underlying concepts, strategies and issues involved in the marketing of products and services.

#### **Course Contents**

Nature and scope of marketing, Marketing concept and Market philosophy, Corporate orientations towards the market place, The Marketing environment and Environment scanning, Marketing information system and Marketing research

Understanding consumer and Industrial markets. Market segmentation, Targeting and positioning; Product decisions - product mix, product life cycle, new product development,

Branding and packaging decisions, Pricing methods and strategies. Promotion decisions promotion mix, advertising, sales promotion, publicity and personal selling;

Channel management - selection, co-operation and conflict management, vertical marketing Implementation and systems, Organising and implementing marketing in the Organisation.

Evaluation and control of marketing efforts; New issues in marketing, Services marketing and 7P's of services marketing, Rural marketing, Global marketing, Green marketing.

#### Suggested Readings

1Enis, B M. Marketing Classics: A Selection of Influential Articles. New York, McGraw Hill, 1991.

2Kotler, Philip and Armstrong, G. Principles of Marketing.New Delhi, Prentice Hall of India, 1997.

3Kotler, Philip. Marketing Management: Analysis, Planning, Implementation and Control. New Delhi, Prentice Hall of India, 1994.

4Ramaswamy, V S and Namakumari, S. Marketing Management: Planning, Control. New Delhi, MacMillan, 1990.

## DCC-4 (Research Methodology) Th (4 Cr)

Objectives

To equip the students with the basic understanding of the research methodology and to provide an insight into the application of modern analytical tools and techniques for the purpose of management decision making.

**Course Contents** 

Unit-I

Foundation of Research: Meaning, Objectives, Motivations, utility. Concept of Theory, empiricism, deductive and inductive theory. Characteristics of scientific Method, Understanding the Language of Research —Concept & Construct. Definition —Variable .Research Process, Nature and Scope of Research Methodology; Problem Formulation and Statement of Research Objectives.

Unit-II

Research Design; Concept And Importance in Research, Features of good research design, Types of Research Designs – Exploratory Research Designs, Descriptive Research Designs Experimental Research Designs Qualitative & Quantitative Research; Qualitative research-Quantitative Research. Difference between Qualitative & Quantitative Research Unit –III

Measurement: Concept of measurement- What is measured? Problems in measurement in management research- Validity and reliability. Levels of Measurement -Nominal, Ordinal, Interval, Ratio. Attitude Scaling techniques, Motivational Research Techniques

Types of Data: Secondary Data –Definition Sources ,Characteristics . Primary data –Definitions , Advantages & Disadvantages Over Secondary data, Observation Method ,Questionnaire Construction , Personal Interview ,Telephonic Interview ,Mail Survey ,Email/Internet survey.

Sampling: Concepts of Statistical Population, Sample ,Sampling Frame ,Sampling error, Sample Size ,Non Response. Characteristics of a good Sample .Probability Sample –Simple Random Sample, Systematic Sample ,Stratified Random Sample & multistage sampling .Non Probability Sample –Judgment ,Convenience ,Quota & Snowballing methods .Determining size of sample –Practical consideration in sampling & sample size.

Unit -IV

Data Analysis: Data Preparation – Univariate analysis (Frequency Tables, bar charts, pie charts, percentages). Null and Alternate Hypothesis; Type I and Type II error; critical Region; level of significance. Parametric and Non- Parametric test, Parametric: t-Test & Z test & Multivariate Analysis, Non- Parametric test: Run test, KW test, Whitney test.

Unit -V

Bivariate Analysis – Cross Tabulation and Chi – Square, F-ANOVA.

Report Preparation: Pre-Writing Consideration, Format of Marketing research report, common Problem Encountered when preparing the marketing research report. Presenting the research report.

## Suggested Readings

- 1. Andrews, F.M. and S.B. Withey Social Indicators of Well Being, Plenum Press, NY, 1976
- 2.Bennet, Roger: Management Research, I LO, 1 983
- 3 Fowler, Floyd J.Jr., Survey Methods, 2" ed., Sage Pub., 1993
- 4.Fox, J.A.and P.E. Tracy: Randomized Response: A Method of Sensitive Surveys, Sage Pub., 1986
- 5. Gupta, S.P. Statistical Methods, 30" ed,, Sultan Chand, New Delhi, 2001
- 6.Golden,-Biddle,Koren and Karen D.Locke: Composing Qualitative Research, Sage Pub., 1997
- 7. Salkind, Neilj. Exploring Research, 3rd ed., Prentice-Hail, NJ, 1997

#### DCC-1 (Accouting for managers) Th/Practical (4 Cr)

## **Objectives**

The basic purpose of this course is to develop an insight of postulates, principles and techniques of accounting and utilization of financial and accounting information for planning, decision-making and control.

#### **Course Contents**

Financial Accounting - Concept, Importance and Scope, Generally Accepted Accounting Principles,

Preparation of Financial Statements with special reference to analysis of a Balance Sheet and Measurement of Business Income; Management Accounting - Concept, Need, Importance and Scope

Financial Statement Analysis, Ratio analysis, Funds Flow Analysis, Cash Flows analysis.

Cost Accounting - Cost, Cost Classifications, Cost Sheet, Cost Accounting, Records and Processes, Cost Ledger and Control Accounts, Reconciliation and Integration between Financial and Cost Accounts; Overhead Cost and Control; Costing for Decision-Making, Marginal Costing and Breakeven analysis,

Budget and Budgetary Control, Performance Budgeting, Zero-Base Budgeting; Standard Costing and Variance Analysis - Material Labour and Overheads.

## Suggested Readings

1 .Anthony R N and Reece J S. Accounting Principles, 6th ed., Homewood, Illinois, Richard D. Irwin, 1995.

Bhattacharya S K and Dearden J. Accounting for Management Text and Cases. New Delhi, Vikas, 1996.

Heitger, L E and Matulich, Serge. Financial Accounting. New York, McGraw Hill. 1990.

Hingorani, N L. and Ramanathan, A R. Management Accounting.5th ed., New Delhi, Sultan Chand, 1992.

Horngren, Charles etc. Principles of Financial and Management Accounting. Englewood Cliffs, New Jersey, Prentice Hall Inc., 1994.

Needles, Belverd, etc. Financial and Managerial Accounting. Boston, Houghton Miffin Company, 1994.

Vij, Madhu. Financial and Management Accounting. New Delhi, Anmol Publications, 1997.

## DCC-2 (Statistical Methods) Th/Practical (4 Cr)

## Objectives

The objective of the course is to make the students familiar with some basic statistical and linear programming techniques. The main focus, however, is in their applications in business decision making.

#### **Course Contents**

#### Unit -I

Introduction: Application of Statistics in Business & Management; Basic Concepts of Statistical Studies: Population, Variable and Parameter, Sample; Classification of Data; Diagrammatic & Graphical Presentation of Data: Bar Diagram, Histogram, Pie – Diagram, Frequency Polygons, and Ogives.

#### Unit-II

Summary Statistics: Measures of Central Tendency: Arithmetic Mean, Weighted Mean, Median and Mode .Index Numbers: Concept & Applications.

#### Unit-III

Measures of Dispersion: Range, Average Deviation. Standard Deviation, Variance and Coefficient of Variation.

#### Unit-IV

Forecasting Techniques: Simple Correlation & Regression Analysis, Time Series Analysis- Trend Analysis, Cyclical Analysis, Seasonal Analysis, Irregular Variation

## Unit-V

Probability: Introduction of Probability Theories, Concepts, Addition & Multiplication Theorems, Probability Distributions: Binomial Poission, Normal and Exponential

- 1. Chadha, N. K. Statistics for Behavioral and Social Scientists, Reliance Publishing House, Delhi, 1996
- 2.Gupta, S P and Gupta M P. Business Statistics. New Delhi, Sultan Chand, 1997.
- 3. Kazmier, L J and Pohl, N F. Basic Statistics for Business and Economics. New York, McGraw Hill, 1988.

# DCC-5-(Human Resource Management )Th (4 Cr) Objectives

In a complex world of industry and business, organisational efficiency is largely dependent on the contribution made by the members of the Organisation. The Objectives of this course is to sensitize students to the various facets of managing people and to create an understanding of the various policies and practices of human resource management.

## **Course Contents**

- 1. Concepts and Perspectives on Human Resource Management; Human Resource Management in a Changing Environment. Corporate Objectives and Human Resource Planning; HR Structure and strategy.
- 2 Recruitment and selection; Manpower planning; Job Analysis and Role Description; Methods of Manpower Search; Attracting and Selecting Human Resources, Induction and Socialization; Career Planning, Succession Planning.
- 3 Manpower Training and Development design and evaluation of T & D Programs; Performance Appraisal and Potential Evaluation; Retirement and other separation processes

## 4.FINANCIAL COMPENSATION, PRODUCTIVITY AND MORALE: -

Principal Compensation Issues & Management – Job Evaluation , Productivity, Employee Morale And Motivation; Stress Management and Quality of Work Life

5.Industrial Relations & Trade Unions; Dispute Resolution & Grievance Management; Employee Empowerment; workers and managerial decision making; collective bargaining.

## Suggested Readings

Aswathappa, K. Human Resource and Personnel Management Tata McGraw Hill, New Delhi, 1 997

De Cenzo, D A & Robbins S P. Human Resource Management.5th ed., New York, John Wiley, 1994.

Guy, V & Mattock J.The New International Manager. London, Kogan Page, 1993.

Holloway, J. ed. Performance Measurement and Evaluation. New Delhi, Page, 1995.

## DCC-6 (Managerial Skill Development ) ( Th (4 Cr)

## **Objectives**

The course is aimed at equipping the students with the necessary & techniques and skills of communication to inform others, inspire them and enlist their activity and willing cooperation in the performance of their jobs.

#### **Course Contents**

I.. Importance and nature of business communication; Effective Communication skill; Process of communication; Barriers and gateways in communication; Intra personal communication and body language; Inter personal communication and relationship; Leadership skills; Team building and public speaking; Presentation skills; Case study and situational analysis

Dos and Don'ts of Business writing; Commercial letters; Writing Business reports; Written communication - 7'c of written business communication, Approaches to written communication - deductive and inductive; Writing for enquiries, Claims, invitation, reservations and orders, refusal and collection letters, sales letters, resume writing and recommendation letters; Report writing- long and short business reports and business proposal.

Feelings- types and steps to deal with complex feelings; Assertiveness and confidence building; Body language- role of different parts of the body in communication; Non verbal behavior; Conflict- types and resolutions; Emotions- emotional empathy and emotional intelligence

Techniques for personality development (a) self confidence (b) mnemonics goal settings (d) time management (e) effective planning (f) stress management

Developing an understanding of social etiquettes; Dressing for interview-do's and don'ts for men and women; Dressing for office-do's and don'ts for men and women; Dining etiquettes; Telephone and email etiquettes; Ethical dilemmas-code of conduct

#### Suggested Readings

1 .Bowman, Joel P and Branchaw, Bernadine P. "Business Communication: From Process to Product". 1987. Dryden Press, Chicago.

Hatch, Richard. "Communicating in Business". 1977 Science Research

- 2 Murphy, Herta A and Peck, Charrles E. "Effective Business Communications". 2nd ed. 1976. Tata McGraw Hill, New Delhi.
- 3. Pearce, C Glenn etc. "Business Communications: Principles and Applications". 2nd ed. 1988. John Wiley, New York.

## DCC-7 (Production and Operation Management )(Th (4 Cr)7

## **Objectives**

The Course is designed to acquaint the students with decision making in: Planning, scheduling and control of Production and Operation functions in both manufacturing and services; Productivity improvement in operations through layout engineering and quality management e tc.; Effective and efficient flow, replenishment and control of materials with reference to both manufacturing and services organizations.

#### **Course Contents**

- 1. Nature and Scope of Production and Operations Management Decisions, Types of Manufacturing Systems, Productivity, Challenges in Operations Management, Operations Strategy.
- 2 Production Planning and Control: An Overview Facilities Location, Location Planning, Facilities Layout.(a) Capacity Planning, Aggregate Planning (b) Master Production Scheduling (c) MRP, MRP II (d) Enterprise Resource Planning (ERP), (e) Business Process Reengineering (BPR).
- 3. Work Study, Methods Study, Work Measurement, Performance Rating and computation of Standard Time, Maintenance Management, Industrial Safety, Supply Chain Management, Enablers of supply chain performance, Supply Chain Strategy and performance measures.
- 4. Material Management: An Overview; Material Handling Equipment, Assembly Line Balancing, Line Balancing Problems, Line Balancing Approaches, Operation Decision, MRP, Purchasing and Store Management, Inventory Control and Budgeting.
- 5. Concept of Quality and Quality Assurance, Statistical Process Control (Acceptance Samplings), ISO- 9000, ISO- 14000, OHSAS-18000, SA- 8000, Total Quality Management (TQM), S ix Sigma, DMAIC, Lean Management.

- 1. Adam, E E& Ebert, RJ. Production and Operations Management. 6th ed., New Delhi, Prentice Hall of India, 1995.
- 2 Amrine Harold T. etc. Manufacturing Organisation and Management. Englewood Cliffs,
- 3. Mahadevan, Operations Management Theory and Practice, PEARSON, The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course.

## Objectives:

The purpose of this course is to acquaint the students with the broad framework of financial decision making in a business unit.

#### **Course Contents**

- 1. Aims and Objectives of Financial Management; Time value of Money: Instruments of Long Term Finance- Equity, ECB, ADR, and GDR. Cost of Different Sources of Raising Capital, Weighted Average Cost of Capital. Marginal cost of capital
- 2 Operating and Financial Leverage. Valuation and Capital Structure Decisions: Capital Structure Theories, Optimum Capital Structure, Economics Value Added.
- 3 Capital Budgeting, Methods of Capital Budgeting, Analysis of Risk in Capital Budgeting,
- 4. Internal Financing and Dividend Policy. Financial Modelling, Use of Excel for Financial Decision Making.
- 5. Working Capital Concept Nature and scope. Determinants of Working Capital instruments of Short -term Financing Management of Working Capital Cash. Receivable and Inventory Management.

## Suggested Readings

- 1. Archer, Stephen H. etc. Financial Management. New York, John Wiley, 1990.
- 2. Bhalla, V K. Financial Management and Policy. 2" ed., New Delhi, Anmol, 1998.
- 3. Brealey, Richard A. and Myers Stewart C. Principles of Corporate Finance. 5th ed., New Delhi, McGraw Hill, 1996.
- 4. Hampton, John. Financial Decision Making. Englewood Cliffs, New Jersey, Prentice Hall Inc., 1997.
- 5. Van Horne, James C. Financial Management and Policy. 1 Oth ed., New Delhi, Prentice Hall of India, 1997.

## **Objectives**

The objective of the course is to make the students familiar with some basic statistical and linear programming techniques. The main focus, however, is in their application in business decision making.

#### **Course Contents**

#### Unit-I

Matrices and their Applications.Markov's Analysis, Function and Iterations of Business Applications.

#### Unit-II

Linear Programming: Introduction of Operations Research, Scope and Models in Operations research, Scope and models in Operations Research, Introduction of linear Programming, Formulation of LPP, Solutions of LPP-Graphical Methods & Simplex Procedure, Duality.

#### UNIT -III

Introduction of Transportation Problems, Procedure of finding optimal solution, Assignment Problem & its solution.

#### **UNIT-IV**

Decision Theory: Introduction of Decision Theory, Decision Environments, Decision Making under Risk- EMV & EOL Decision Making under Uncertainty- Maximax, Maximin, Minimax, Regret& Laplace Criterion.

Games Theory - 2x2 zero sum game with dominance - Pure Strategy and Mixed Strategy.

#### **UNIT-V**

PERT- CPM, Inventory control.Monte Carlo Simulation (Elementary idea only).

- 1. Narang ,A S. Linear Programming And Decision Making . New Delhi , Sultan Chand, 1995.
- 2. Sharma, J.K. Fundamentals of Operation research, Machmillan, New Delhi, 2001
- 3. Quantitative Techniques –N.D. Vohra

# DCC-8- DECISION SUPPORT SYSTEMS AND MANAGEMENT INFORMATION SYSTEM Th (4 Cr)

## Objective

The objective of the course is to develop the basic understanding of the decision support system of the Artificial Intelligence for Business Organization.

#### Course Contents

- I. Management Information System: Definitions Basic Concepts, Frameworks, System Development initiative, Different Methodologies Life Cycle and Prototype approach.
- II. Features of various CBIS, Types of Information Systems. TPS, MIS, DSS, KWS, OAS, experts system: evaluation and control of information systems.
- III. Data Base Management system: Sources of data data file environment, problem solving, decision making, data models, data mining, elementary idea about RDBMS. Simon's model in information system design, Simulation technique
- IV. Decision Support System An Overview: Relevance, scope, characteristics and capabilities, Components, Classification of DSS User Interface graphics menus Forms, DSS tools DSS generators, Specific DSS, Constructing a DSS: Steps in designing DSS, GDSS: Introduction & Applications.
- V. Application of Information System in Marketing, Production, Finance, Inventory and HR, Enterprise Resource Planning, Business Process re-engineering, Gaming.

- 1. Keen, Peter G.W.: Decision Support System an Organisational Perspective Addison- Wesley Pub.
- 2. Theierauff, Robert J. Decision Support System for-effective planning Prentice Hall
- 1982.
- 3. Krober, Donald W., and Hugh. J. Watson Computer Based Information System Newyork, 1984
- 4. DavisL, Michael W. A management approach Macmillan Publishing Company, Prentice Hali, New Jersey, 1988.
- 5. Andrew P. Decision Support System Engineering, Sage, John Wiley & Sons, New York, 1991.

## DCC-9 (Business Policy & Strategic Management) Th (4 Cr)

## Objectives

The Objectives of this course is to develop understanding about strategic processes and their impact on a firm.

#### Course Contents:

#### Unit- I

Business and t ypes of business, Defining strategy, Strategy and the Quest for Competitive Advantage: Military origins of strategy – Evolution - Concept and Characteristics of strategic management – Mintzerbg's 5Ps of strategy – Corporate, Business and Functional Levels of strategy - Strategic Management Process. . Strategic Intent & Strategy Formulation: Vision, mission and purpose – Business definition, objectives and goals – Stakeholders in business and their roles in strategic management - Corporate Social Responsibility, Ethical and Social Considerations in Strategy Development, Strategic management in Indian Scenario.

#### Unit- II

Strategic analysis: Analyzing Company's Resources and Competitive Position

- Organizational Capability Profile – Strategic Advantage Profile – Core Competence - Distinctive competitiveness. Analyzing Company's External Environment: Environmental appraisal – Scenario planning – Preparing an Environmental Threat and Opportunity Profile (ETOP) – Industry Analysis - Porter's Five Forces Model of competition.

#### Unit- III

Corporate Portfolio Analysis: Business Portfolio Analysis - Synergy and Dysergy - BCG Matrix - GE 9 Cell Model - Concept of Stretch, Leverage and fit 6. Generic Competitive Strategies: Low cos t, Differentiation, Focus. . Grand Strategies: Stability, Growth (Diversification Strategies, Vertical Integration Strategies, Mergers, Acquisition & Takeover Strategies, Strategic Alliances & Collaborative Partnerships), Retrenchment, Outsourcing Strategies. Tailoring strategy to fit specific industry - Life Cycle Analysis - Emerging, Growing, Mature& Declining Industries.

Unit- IV

Strategy implementation - Project implementation - Procedural implementation - Resource Allocation - Organization Structure - Matching structure and strategy, Behavioural issues in implementation - Corporate culture - McKinsey's 7s Framework - Concepts of Learning Organization . Functional issues - Functional plans and policies - Financial, Marketing, Operations, Personnel, IT. Strategy Evaluation - Operations Control and Strategic Control - Symptoms of malfunctioning of strategy - Balanced Scorecard.

#### UNIT- V

New Business Models and strategies for Internet Economy: Shaping characteristics of E- Commerce environment – E- Commerce Business Model and Strategies – Internet Strategies for Traditional Business – Key success factors in E- Commerce – Virtual Value Chain.

Cases in strategic management: A minimum of 5 cases encompassing the above topics to be analyzed and discussed in the class.

#### Books Recommended:-

- 1. A Thompson Jr., A J Strickland III, J E Gamble, Crafting & Executing Strategy The Quest for Competitive Advantage, Tata McGraw Hill, 4th ed., 2005.
- 2 Ranjan Das, Crafting the Strategy: Concepts and Cases in Strategic Management, Tata McGraw Hill, 2004.
- 3. Henry, Mintzberg, Bruce, Ahlstrand and Joseph, Lampel (1998). Strategy Safari. 31 Free Press, New York.
- 4. Gary, Hamel and Prahalad, C. K. (1999). Competing for the Future. HBS Press.
- 5. Ed. C. A. Montgomery, M. E. Porter, Strategy Seeking and Securing Competitive Advantage, Harvard Business Review Publications, 1991.
- 6 Peter F. Drucker, Managing in a Time of Great Change, Truman Talley Books / Plume Penguin Group, 1998.

## **Objectives**

The course is designed to assist the students in understanding basic laws affecting the operations of a business enterprise.

#### **Course Contents**

- I The Indian Contract Act, 1872: Essentials of a Valid Contract. Void Agreements. Performance of Contracts. Breach of Contract and its Remedies. Quasi-Contracts.
- II. The Sale of Goods Act, 1930: Formation of a Contract. Rights of an Unpaid Seller. Consumer Protection Act.
- III. The Negotiable Instruments Act, 1881: Nature and Types. Negotiation and Assignment. Holder-in-Due Course, Dishonour and Discharge of a Negotiable Instrument. Arbitration
- IV. The Companies Act, 2013; Nature and Types of Companies. Formation. Memorandum and Articles of Association. Prospectus Allotment of Shares. Shares and Share Capital. Membership. Borrowing Powers.
- V. Management and Meetings. Accounts and Audit. Compromise Arrangements and Reconstruction. Prevention of Oppression and Mismanagement. Winding Up. Cyber Laws.

## Suggested Readings

- 1. Avtar Singh. Company Law. 1 1 th ed. Lucknow, Eastern, 1996.
- 2. Khergamwala, J S. The Negotiable Instrument Acts. Bombay, N.M. Tripathi, 1980.
- 3. Ramaiya, A. Guide to the Companies Act. Nagpur, Wadhwa, 1992.
- 4. Shah, S M. Lectures on Company Law. Bombay, N.M. Tripathi, 1990.
- 5. Tuteja, S K. Business Law For Managers. New Delhi, Sultan Chand, 1998.

#### **Fundamentals of E-Commerce**

#### **Objectives**

The objective of this paper is to educate the learner about e-Commerce concepts along with applications and its structure in India, so students can understand fundamental, security issues and measures for E-Commerce and its related applications.

#### UNIT 1 Introduction to E-Commerce

E-Commerce – Introduction, Definition, Scope, Internet commerce v/s E-Commerce, Electronic Commerce- Market – Trade Cycle, Electric Data Interchange, Forces fueling E-commerce, E-Commerce Functions, Challenges to traditional methods, E-commerce industry framework, Types of E-commerce, Scope and limitations of e-commerce.

## **UNIT 2 E-Commerce Architecture**

Internet and Its role in e-commerce, Internet Service Provider and Internet Access Provider, Procedure of registering Internet, Domain, establishing connectivity to Internet, Tools and services of Internet, Internet v/s online services, Procedure of opening e-mail accounts on Internet, on line payments. Web system architecture: Introduction to HTML, HTTP and HTTPS, Web page formatting with text, image, links, tables, frames and form.

#### UNIT 3 E-Commerce Models and Payment System

Classification of E-Commerce practices, Different models (B2B, B2C, C2C, G2B, and B2G etc) of Ecommerce and their functions, Ethical and Legal issues in EC models, Indian scenario for Taxation in ECommerce, Cross border obstructions in EC. Electronic Money and Online Payment Methods: Card Money, Virtual Money, Payment Transfer methods.

## **UNIT 4 E-Commerce Applications**

Manufacturing & Marketing Applications, Retail & Wholesale Applications, Entertainment & Games Applications, Finance & Banking Applications, Auction & Bid Applications, Education & Publishing Applications.

#### UNIT 5 Business Strategies for E-Commerce

Value Chain, competitive Strategy and advantages, Business Strategy – B2B and B2C, B2B-Inter organizational transactions, EDI, Benefits, Technology, Standards, Security, on line business, B2C – Consumer transaction, e-shop Internet. Security strategies of EC: Authentication and Authorization in EC, Threats-Frauds and scams in EC, Secure customer services.

- 1. Computer Today S.Bansundara
- 2. E-Commerce: The Cutting Edge of Business Bajaj and Nag, Tata McGrawHill
- 3. E-Commerce Concepts Models & Strategies C.S.V.Murthy, HimalayaPublication.
- 4. E-Commerce Mathew Rergnolds, Wrox publicationCommunication
- 5. Global Electronic Commerce- Theory and Case Studies J Christopher Westland, H K Clark- UniversityPress
- 6. E-Commerce an Indian perspective P T Joseph Prentice Hall, 2/e,2005

## **Objectives**

The objective of this paper is to educate the learner about e-Commerce technology and tools with some security aspects in their uses.

#### **Course Contents:**

#### **UNIT 1 Transaction Security**

Functionality of Network Models, Protocols for OSI and TCP Models, Firewalls & N/W security, Type of firewall, security policies, Emerging firewall management issue, Transaction security, Types of online transactions, Requirement for online transactions.

## **UNIT 2 Encryption and Transaction Security**

Secret –key Encryption, Public key Encryption, Secret key Cryptography, Encryption and Decryption, Authorization and Authentication, Encryption algorithms, Decryption Implementation & management issues, secure socket layers (SSL), Security & online web based banking.

## **UNIT 3 Security of e-commerce**

Internet security, Setting up Internet security, Maintaining secure information, Encryption Issues, Digital signature and other security measures, Firewall. Security Breaches and Cyber Law.

## **UNIT 4 Payment Systems**

Electronic Data Interchange, Digital cash, properties, Electronic check & benefits, Online credit card system, Types of credit card payments, Secure electronic transactions (SET), Other emerging financial instruments, Debit card & Point of sale (POS), Debit card & Ebenefit transfer, Smart cards, UPI

## **UNIT 5 - E-Payment**

Overview of E-payment system, transactions through Internet, electronic fund transfer, intelligent agents, Requirements of e-payment systems, functioning of debit and credit cards, Pre and Post payment services. Different e-Transactions: E-com & Banking, E-com & Retailing, E-com & Online Publishing, e-com and gaming.

- E-Commerce S.Jaiswal
- E-Commerce Strategy, Technology & Applications David Whitely, TMGH
- Electronic Payment Systems for E-Commerce Michael A. Peirce, Hitesh Tewari, O'MahonyDonal.

#### **Managerial Communication**

- Unit I Communication Managing and Significance for management Types of Communication Media – Barriers to communication – Principles of effective communication.
- Unit II Correspondence Norms for business Letters for different kinds of situations -Personalised standard letters, enquiries, customer's complaints, collection letters, sales promotion letters.
- Unit III Report Writing Structure of Reports Long and short reports Formal and informal reports - Writing research reports - Technical reports - Norms for including exhibits and appendices.
- Unit IV Conducting Meeting Procedure Preparing agenda, Minutes and resolutions Conducting seminars and conferences. Procedure of regulating speech - Evaluating oral presentation – Group Discussion – Drafting speech.
- Unit V Resume Writing Application Letter Interview Techniques Body Language -Manners for Managers.

Suggested Readings: 1. Murphy and Peek – Effective Business Communication 2nd Ed. Tata McGraw Hill N.D. 2. AshaKaul – Effective Business Communication Prentice Hall 3. Rajendra Paul and Koraiahaili - Business Communication 4.L.Shuster and Peter WIllimson - Written Communication in Business.

#### **Objectives**

The objective of this paper is to educate the learner about Information Technology Trends in e-Commerce and Various aspect of Network Security. Course Contents

#### **UNIT 1 Introduction to Information Security**

Attributes of Information Security, Security Strategies & Processes, Importance of Security Policies and Audits, Threats & Vulnerabilities: Unauthorized Access, Impersonation, Denial of Service, Malicious Software, Trap Doors, Logic Bomb, Trojan Horses, Viruses, Worms.

#### **Unit 2 Identification and Authentication**

Definitions, Types of authentication, Password Authentication, Password Vulnerabilities & Attacks, Brute Force & Dictionary Attacks, Password Policy & Discipline, Biometrics: Types of Biometric Techniques, False Rejection, False Acceptance, Cross Over Error Rates.

## **Unit 3 Web Security and Application Security**

Web Servers & Browsers, Server Security features, Server privileges, SSL & SET, Firewalls, Firewall Characteristics, Types of Firewalls, Application Level Gateway or Proxy

## **Unit 4 Network Security**

Overview of IPV4, OSI Model, Maximum Transfer Unit, IP, TCP, UDP, ICMP, ARP, RARP and DNS, Network Attacks, Denial of Service Attacks, Virtual Private Network Technology, Security Policy Design: Definition, Security Policy Document, Risk Management,

#### **Unit 5 Security Framework**

Security Policy and Framework, Components of an enterprise Network, Elements of Security Architecture, Design and Implementation: Physical Security Controls, Logical Security Controls, Audit Trails, Security Awareness Training, Incident Handling

- Technical Resource and Course Web Site for Cryptography and Network Security, 3rd Edition, by William Stallings.
- Cryptography and Network Security by AtulKahate, TMG 2003

E-advertising 28

#### **Objectives**

The objective of this paper is to create awareness about E-advertising and educate the learner about use of internet in advertising.

## **Course Content:**

Unit 1.

Advertising & Electronic Media: Introduction, functions, concepts & Evolution of Advertising. Types of advertising, advertising appeals, Copywriting. Comparison between Traditional & Modern Advertising media, National & Global Advertising scene.

Unit 2.

E-Advertising channels: Radio channels: Community Satellite Radio, Misc. radio networks. Audio-Visual Interface System for Advertising. Television Channels: Evolution of TV channels. Doordarshan to satellite, Cable & STB channels, National & Regional channels, Internet & Area networks.

Unit 3.

Social Media advertising: Role of Social Media in business, Social networking sites advertising, pinterest advertising, YouTube advertising, Mobile App advertising, Socioeconomic effects of social media advertising.

Unit 4.

Advertising planning & scheduling. Media planning, Factors influencing the choice of media, Cost Planning, Cost & Impact Analysis, Media Scheduling, Advertising Agencies & their role.

Unit 5.

Measuring advertising efficiency, Evaluation of advertising effectiveness, Methods of measuring advertising effectiveness, Pre-testing & Post-testing.

## **Suggested Readings:**

Shamci A.N., Electronic Media, Anmol Publication ArvindSinghal and Everett M. Rogers, India's Communication Revolution- Sage Pub. 2007 Further books can be referred at time of study. The objective of this paper is to create awareness about Knowledge Management and educate the learner about use of electronic gazettes for KMS.

## **Course Contents:**

## **Unit 1 Basic Concepts of Knowledge Management**

Definition of KM, Objectives of KM, Activities of KM, Effective Presentation & Language of KM, Scientific Management v/s KnowledgeManagement.

## **Unit 2 KM – Systems Dimension**

Introduction –Technical perspectives on KM - Internet – Intranet - & World Wide Web - Virtual Communications & relationships. - Multimedia Technology – Software Technology-Building Technical infrastructure of KM.

## **Unit 3 KM – The People Dimension**

People management policies & practices in the knowledge environment. - Motivating & rewarding workers. - Recruitment, retention & planning, etc in a knowledge environment. - Impact of KM on managers. - Team work in a knowledge environment.

## **Unit 4 KM – Organizational Dimension**

Cultural Aspects, learning effects, process model- New organizational forms in the knowledge economy. Identifying knowledge resources – knowledge audits –ideas of holistic KMS.Management & knowledge economy.

#### **Unit 5 KM – Tools and Techniques**

DIKW Model and Its application in knowledge management, Knowledge processing, Information Systems in KM, Tools to access and extract knowledge - WEB, BLOG, TAG, WIKI. Techniques for knowledge management – GDSS (Group Decision Support System), CBRS (Case Based Reasoning System), Search Engine and Artificial Neural networks.

- A practical guide to knowledge Management- Brelade& Harman a. Published by VinodVasishtha for Viva Books Pvt. Ltd' 4737/23 Ansari Road, Daryaganj, New Delhi110012.
- Management Information System : Gordon B. Davis, Margrethe H. Olson a. TATA McGRAW-HILL Publishing Co. Ltd. NewDelhi.
- Management Information System : Waman S Jawadekar a. TATA McGRAW-HILL Publishing Co. Ltd. NewDelhi.
- Information Technology: V. Rajaraman, a. Prentice Hall of India PvtLtd., New Delhi- 110 001
- Human Resource Management: S. Seetharaman, B. Venkatsawara a. Prasad, SCITECH PUBLICATIONS: No.4. Anna Street, Chitlapakkam, Chennai- 600064.

## **Public Relations & Corporate Communications**

1. Public Relations & Corporate Communication: Introduction to corporate communication, Public relations writing-writing to inform, writing to persuade, Design & lay out, Online public relations (4+1) 2. Media Relations: Building maintaining relationship with credibility with media, Developing methodologies for successful practice of media relations (5+1) 3. Public Relations: Concept, theory, history & practice of public relations, Importance of PR for HR professionals, PR campaign & strategies for PR, Evaluating PR activities (5+1) 4. Communication Management: Presentation skills, Developing strategic communication plan, Synthesizing internal & external initiatives, Event Management (4+1) 5. Field Study/ Desk Research: Student along with faculty are expected to study PR activities and communication strategies designed & practiced by the organizations in the area & prepare a report. (7+1) Suggested Text Books: 1. Public Relations, Phillip Henslowe, Chartered Institute of PR Suggested Reference Books: 1. Public Affairs in Practice, Stuart Thomson & Stevee John, Chartered Institute of PR 2. Develop your PR Skills, Neil Richardson& Lucy Laville, The Sunday Times, 3. Creativity in PR, Andy Green, Chartered Institute of PR 4. Running a PR Department, Mike Beard, Chartered Institute of PR

## **Objectives**

The objective of this paper is to educate the learner about Database Management System and the application of systems designed to manage the data resources of organizations.

#### **Course Contents:**

#### **Unit 1 Introduction to DBMS**

Data Processing Concepts, Data Structures, File Processing and Access Methods, Difference between FPS and DBMS, Characteristics of DBMS. Functions of Transaction Processes and their Communications Interface with Database Management Systems. Taxonomy of Data Management Systems, Various Data Base Management Models.

## **Unit 2 Classification and Types of DBMS**

Relation Database Management System, Distributed Data Base Systems, On-line Data Bases system, Object Oriented Data Bases. Managerial Issues Related to Data Base Management. Evaluation of Commercially Available Software Systems with managerial Emphasis on Tradeoffs Among Cost, Capacity, and Responsiveness.

#### **Unit 3 Structure of DBMS**

Schema, Sub-Schema, Relation, Tuples, Attributes, Normalization: 1NF, 2NF, 3NF, BCNF and Other Normalization Forms. Schema Design and Development. Keys as Attributes: Primary Key, Secondary Key, Candidate Key, Referential Key and Unique Key. ER-Diagram: Design and implementation.

## **Unit 4 Analysis of DBMS**

Distributed Data Processing Systems and a Need for Database Environment for such a System Physical Database Structures. Study of a Relational Database Management Systems for Successful implementation of Distributed Systems, Re-organization Problems, Implementation and Maintenance Issues, DatabaseAdministration

## **Unit 5 Structured Query Languages**

Evolution of Structured Query Language, Evaluation Criteria of 4GL, Data Definition Language(DDL)- commands and application, Data Manipulation Language (DML) – commands and applications, Performance Analysis, Recovery issues.

- Coad, Peter and Edward, Yourdon, Object-Oriented Analysis. 2nd ed., Englewood Cliff, New Jersey, Yourdon Press,99.
- Kroenke, David M. Data base Processing: Fundamentals, Design, Implementation. 4th ed., New York, McMillan, 1992.
- Database System Concepts by HenrtyKorth, Abraham Silberschatz and S. Sudarshan, TMG

#### **Course Contents:**

**Unit I- Nature & Scope E Channels**, Various models of E Channels, Understanding Local channel options, Partnering Marketplace Sales, Partnering Search Engines, Partnering With New Startups, integrating Web-stores.

Unit-II E-business Website/ E-store Design: Choose A Domain Name, Designing Low Cost Website, The Best Web Hosting Service, Search Engine Friendly Contents, Publishing Your Web-store Online, Affiliate Networks & Sales Improvement, Selling Informations, Payment Gateway Safe & Best, Joining The Wheels With The "Shopping" Cart, Web-store's Inventory Management, Logistics & OrderFulfillment.

**Unit-III E-Behavior and Managing Web Traffic**: Understanding The Customers Mindset, Search Engine Optimization & Ranking, Get Your Retail Shop Online, Officially Launching Your Ebusiness, Online Vs Offline Customers: Difference & Similarities, Converting Traffic Into Sales, Online Branding & Reputation Management, Digital Marketing Strategy.

Unit IV- Managing Experience of E shopping: Giving The Perfect Shopping Experience, Making Your Customers A Celebrity, Stay Local Market Global, Delivery Model & Backend Automation, Online Business Web Security, Types Of Web Security & Threats, Information Security Planning, Hacked! How To Defend & Backup, Site & Business Safety, Internet Data Security, Digital Marketing & Boosting Sales.

**Unit V- Advanced E-Commerce Business Strategies**: Getting Into Global Markets, Acquiring New Customers Fastly, Adding New Products Expanding Globally, Retaining An Old Customer, Transform A Small Site Into A Million Dollar Business, Hiring Ecommerce Experts & Mentors, Listing Your Company In Stock Markets

- Managing Business in Multi-Channel World: Success Factor of E-Business, TimoSarrien, MakkuTinnila, Anne Tseng-Idea GroupPublishing.
- Management of Electronic and Digital Media, Alan B. Albarran, Cengage Learning. ISBN-13: 9781111344375.

#### INTRODUCTION TO DATA SCIENCE

33

Unit – I: Introduction Introduction to Data Science – Evolution of Data Science – Data Science Roles – Stages in a Data Science Project – Applications of Data Science in various fields – Data Security Issues. Unit – II: Data Collection and Data Pre-Processing Data Collection Strategies – Data Pre-Processing Overview – Data Cleaning – Data Integration and Transformation – Data Reduction - Data Discretization. Unit - III: Exploratory Data Analytics Descriptive Statistics -Mean, Standard Deviation, Skewness and Kurtosis – Box Plots – Pivot Table – Heat Map – Correlation Statistics – ANOVA. Unit – IV: Model Development Simple and Multiple Regression - Model Evaluation using Visualization - Residual Plot - Distribution Plot -Polynomial Regression and Pipelines - Measures for In-sample Evaluation - Prediction and Decision Making. Unit – V: Model Evaluation Generalization Error – Out-of-Sample Evaluation Metrics – Cross Validation – Overfitting – Under Fitting and Model Selection – Prediction by using Ridge Regression – Testing Multiple Parameters by using Grid Search. REFERENCES: 1. JojoMoolayil, "Smarter Decisions: The Intersection of IoT and Data Science", PACKT, 2016. 2. Cathy O'Neil and Rachel Schutt, "Doing Data Science", O'Reilly, 2015. 3. David Dietrich, Barry Heller, Beibei Yang, "Data Science and Big data Analytics", EMC 2013 4.Raj, Pethuru, "Handbook of Research on Cloud Infrastructures for Big Data Analytics", IGI Global.

Digital Business 34

1. Electronic Commerce: The Digital Revolution and Society, The Digital and Social Worlds - The Digital Economy, The Digital Enterprise, Virtual Communities, Online Communities, Defining Electronic Commerce, Emerging E-Commerce Platforms. E-Business, Electronic Markets and Networks; The Content and Framework of E-Commerce, Classification of E-Commerce by the Nature of the Transactions and the Relationships Among Participants, E-Commerce Business Models, Integrating the Marketplace with the Marketspace, Web 2.0. Drivers, Benefits and Limitations of E-Commerce, Impact of E-Commerce on business, government, customers, citizens and society.

- 2. Mobile Commerce, Social Commerce and IoT: Mobile Commerce, Attributes Applications and Benefits of MCommerce, Mobile Marketing Shopping and Advertising. Social Commerce: Social Commerce, Social Business (Enterprise), Social Business Networks and Social Enterprise, Social Media, Platforms for Social Networking; Social Media Marketing, Enterprise 2.0, Improved Business Models. Entrepreneur Networks, Enterprise Social Networks, The Benefits and Limitations of Social Commerce, Benefits to Customers, Retailers, Employees, players in the ecosystem. Social Collaboration (Collaboration 2.0) Essentials of Social Collaboration, Consumer-to-Consumer Electronic Commerce (C2C), Person-to-Person models. Internet of Things: Concept of IoT, Smart Homes and Appliances, Smart Cities, Smart Cars, Wearable Computing and Smart Gadgets.
- 3. Digital Business Ecosystem: Electronic Commerce Mechanisms, Online Purchasing Process, E-Marketplaces Types, Components and Participants, Disintermediation and Reintermediation; Customer Shopping Mechanisms Webstores, Malls, and Portals, Webstores, Electronic Malls, Web (Information) Portals. Intermediaries: Roles of Intermediaries in E-Marketplaces, Merchant Solutions: Electronic Catalogs, Search Engines, and Shopping Carts, Electronic Catalogs, E-Commerce Search Activities, Auctions Traditional Auctions Versus E-Auctions, Dynamic Pricing. Changing Supply Chains: Structure of the Supply Chain, EC Order Fulfillment Process, Speeding Up Deliveries, Partnering Efforts and Outsourcing Logistics, Order Fulfillment in Make-to- Order (MTO) and Mass Customization. Digital Payments: Smart Cards, Stored-Value Cards, EC Micropayments, Payment Gateways, Mobile Payments, Digital and Virtual Currencies, Security, Ethical, Legal, Privacy, and Technology Issues.
- 4. Digital Business Applications I: Electronic Retailing: B2C Electronic Retailing, Characteristics, Advantages, Limitations, E-Tailing Business Models, Classification of Models by Distribution Channel, Referring Directories, Malls with Shared Services. Social Shopping – Concept, Benefits and Drivers, Social Shopping Aids – Recommendations, Reviews, Ratings, and Marketplaces, Real-Time Online Shopping. The Online Versus Off-Line Competition, Click-and-Product and Service Customization and Personalization. Fintech: E-Banking, Brick models, Mobile Banking, Pure Virtual Banks, Insurance, and Stock Trading, Other Mobile Finance Applications. **Digital** Government: Government-to-Citizens, Government-to-Business, Government-to-Government, Government-to-Employees Models, Internal Efficiency and Effectiveness, E-Government and Social Networking, M-Government. E-Learning, E-Training, and E-Books: Basics of ELearning, Characteristics, Advantages, Limitations, Distance Learning and Online Universities, Online Corporate Training, Social Networks and E-Learning, E-Learning Management Systems, Electronic Books.
- 5. Digital Business Applications II: Online Travel and Tourism Services: Characteristics of Online Travel, Benefits, Limitations, and Competition in Online Travel Services. E-Employment: Online Job Market, Social Networks Based Job Markets, Social Recruiting, Virtual Job Fairs and Recruiting Events, Benefits and Limitations of the Electronic Job Market. E-Health: Definition, Electronic Medical Record Systems (EMR), Doctors' System, Patients Services, Medical Devices and Patients Surveillance. Entertainment, Media & Gaming: Service Industry Consumer Applications. Digital Products, Internet TV and Internet Radio, Social Television (TV) Mobile Entertainment, Mobile Marketing, Mobile Streaming Music and Video Providers, Entertainment in Cars; Gaming Mobile Games, Social Games and Gamification, Business of Social Games,

## Suggested Text Books:

- 1. Introduction to E Commerce & Social Commerce, Turban E , Whiteside J , King D, Outland J Springer
- 2. E-Business and E-Commerce Management- Strategy, Implementation and Practice, Dave Chaffey, Pearson Education.
- 3. Electronic Commerce A Managerial Perspective, Efraim Turban, David King, Dennis Viehland, Jae Lee, Pearson Education.

## **Objectives**

The objective of this paper is to create awareness about warehouse Management and educate the learner about use of data mining in warehouse management.

#### **Course Contents**

## **Unit 1 Concept of Warehouse**

Introduction, Objectives, Warehouse Structure, Meaning of a Warehouse, Need for warehousing management, Evolution of warehousing, Role of a warehouse manager, Functions of Warehouses, Types of Warehouses, Warehousing Cost, Warehousing Strategies.

#### **Unit 2 Warehousing in Business Functions**

Supply Chain Impact on Stores and Warehousing, Retail Logistics, Retail transportation, Challenges in retail warehousing, Issues in retail logistics, managing retail shrinkage Significance of Warehousing in Logistics, Warehousing Management Systems (WMS).

## **Unit 3 Warehouse Operations and Applications**

Warehouse Operations, Receiving inventory, Picking inventory, Locating inventory, Organizing inventory, Dispatching inventory, Equipment Used for a Warehouse, Warehouse information, Importance of Warehouse Information, Decision Making Using Warehouse Information, ICT Applications in a Warehouse.

## **Unit 4 Technology Aids in Warehouse Management**

Retailing and Warehousing, Warehousing and Supply Chain, Role of government in warehousing, Bar Code Scanners, Wireless LAN, Mobile Computers, Radio Frequency Identification (RFID), Retail product tracking in warehouse using RFID

## **Unit 5 Data mining and Data Warehouse**

Introduction, Data Mining Functionalities, Classification of data mining systems – Major issues in data mining, Data warehouse and OLAP technology for data mining, What is a data warehouse – A Multi dimensional model, ,Data Warehouse Architecture, Data Warehouse Implementation.

- Michael J A Berry, Gordon S Linoff, Data Mining Techniques, Wiley Publishing inc, Second Edition, 2004. ISBN:81-265-0517-6.
- Alex Berson, Stephen J.Smith, Data warehousing, data mining & OLAP, Tata McGraw HillPublications, 2004.

## **Summer Training Project Report**

At the end of second semester, all students will have to undergo summer training of 6 weeks with an organization by taking up a project study. The conditions of successfully completing the programme shall not be deemed to have been satisfied unless a student undergoes summer training under the supervision of the department in organizations as approved by the Department / Faculty from time to time. Each student will be required to submit a project report to the Department / Faculty for the work undertaken during this period within five weeks of the commencement of the third semester for the purpose of evaluation in the third semester.

## **E-Business Philosophy**

### **Objectives**

The objective of this paper is to educate the learner about e-Business philosophy and various components of it.

### **Course Contents:**

#### **UNIT 1 - Introduction to E-Business**

Evolution of E-Business, Principles of E –business, E-business models, E-Business Strategies, Legal Aspects of E-Business, Steps to Successful E-Business Implementation. Case and scenario discussion for e-business.

### **UNIT 2 - E-Business Issues & Internet Marketing**

Organizational issues, implementation issues, marketing issues, Internet marketing, different stages of Internet marketing, Critical success factors for Internet marketing, Managing Search Engine, Building online Trust.

### **UNIT 3 E-business frameworks**

Channel Enhancement, Global Markets, E-Selling, E –Buying, E –Procurement, Convergence strategies. E-Business Design: Overview, Steps in e-business design, reversing the value chain, Knowledge building, E-market models, Service and Operation Excellence, Coalitions.

### **UNIT 4 Issues and Challenges in E-Business**

Consumer Protection, Cyber Crimes and Cyber Laws, E-cash advantages and disadvantages, Electronic data interchange, Data mining and E-Marketing. Data Analytics and Applications.

## **UNIT 5 E-Business Operations and Processes**

Competitiveness, Profitability and productivity, Operations success- Competing through effective operations, Processes-Products and services to machcustomers needs, Interactive models and software windows for daily operations decisions- Enterprise software- readability and enhanced functionality of SAP R/3 information

- E-Business Fundamental by BansalSK
- E-Business by GuptaVK
- E-Business and E-Commerce Management 2e by DaveChaffey
- The E-Business Book: A Step-by-Step Guide to E-Commerce and Beyond by Davle M SMith

## **Objectives**

The objective of this paper is to educate the learner about Programming and Its application as Internet Applications.

### Course Contents

## **Unit 1 Programming Structure**

Programming concepts, Programming languages Evolution, Object Oriented Language, Java and its Characteristics, Byte Code, Concept of Client and Server side programming, Scripting Language,

Markup Language..

## **Unit 2 HTML Building Blocks**

HTML: Concepts and Tag Notions, Design, Site Design, Linking HTML Documents, Adding Images, audio and video, SCRIPTS: Java Scripts and VB Scripts. Theory of DHTML and CGI, XML, PHP, CSS

## **Unit 3 DOT NET Technologies**

Net Class framework, VB.Net and its relevance, ASP.Net and its appliance, Building .Net Components, ADO.Net, ASP.Net Case Study

## **Unit 4 JAVA Technologies**

Java as OO Language, Data Type and Classes, Packages and Interface, String Handling, Applets, Standard Java Packages

### **Unit 5 PHP Technologies**

Variables, Function, and Forms, \$\_GET, \$\_POST, \$\_REQUEST, File Handling, File Uploads, Sessions, Cookies, Database Connectivity, File Handling, File Uploads, Sending emails.

- HTML 4 for World Wide Web by Castro Addison Wesley (Singapore) Pvt. Ltd., New Delhi
- Principles of Web Designing Joel Sklar, Web Warrior Series Available with Vikas Publishing House Pvt. Ltd., New Delhi
- HTML 4.0 Unleashed by Rick Dranell; Tech Media Publications
- Introducing .NET Wrox Press Limited
- Java How to Program, 7/e by Deitel and Deitel

## **BUSINESS ANALYTICS**

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**Objective:** This course aims to develop overall analytical skills of the students and to help them to apply analytical techniques in business decision making.

### **Course Contents:**

Unit I- Introduction to Business Analytics: Applications, Objectives, Business Analytics and Competitive Advantage, Different types of Data, Big data, Data Mining Process, Data Mining and tools(Hadoop), Introduction to programming Language (R, Python)

**Unit II- Descriptive Analytics:** Introduction, Visualising and exploring data, Descriptive statistics, Sampling and Estimation, Introduction to Probability Distribution, Tools Application, Correlation and other statistical Tools.

**Unit III- Predictive Analytics:** Principles of Forecasting, Predictive Modelling: Logic driven and Data driven Models, Time series, Types of Forecasting, Forecasting Methods and their Characteristics, Trend, Seasonality, Cyclist, Hold winner Forecasting method.

**Unit IV- Prescriptive Analytics:** Business rule algorithms, nonlinear optimization, Machine learning and Artificial Intelligence, Computational Modelling.

**Unit V- Ethics and Analytics:** Data collection and Protection laws, Ethical Use of Analytics, Analytics and Privacy Principles.

- James, E.R (2017) Business Analytics (2 edition). Pearson Education Limited, UK
- Unit I, II, III, IV
- Albright, S.C. & Wayne L. Winston, W.L. (2015) Business Analytics: Data Analysis and Decision Making (5 edition), Cengage Learning Limited
- Unit I. II. III IV
- Collmann, J. &Matei, S.A(2016) Ethical Reasoning in Big Data: An Exploratory Analysis (Computational Social Sciences) 1st ed. Springer International Publishing Switzerland
- Unit V
- Mitchell, T.M. (2017)Machine Learning. First edition. McGraw Hill Education

## **Entrepreneurship Development**

**Unit 1**<sup>st</sup>: Entrepreneurship: Concept, Types of Entrepreneurship, knowledge and skills requirement; Characteristic of successful entrepreneurs; role of entrepreneurship in economic development; entrepreneurship process; factors impacting emergence of entrepreneurship, Entrepreneur v/s Intrapreneur, Entrepreneur Vs. Entrepreneurship, Entrepreneur Vs. Manager,

**Unit 2<sup>nd</sup>:** Entrepreneurial Environment, Rural Entrepreneurship, Theories of Entrepreneurship, And Legal Forms of Enterprises, Electronic Startups, Entrepreneurship Development Program: Needs and Objectives of EDPs, Phases of EDPs, Evaluation of EDPs

**Unit** 3<sup>rd</sup>Feasibility & Prefeasibility study, Fundamental of a good feasibility plan & Components of feasibility – market feasibility, technical/operational feasibility, financial feasibility; drawing business plan; preparing project report; presenting business plan to investors.

Unit 4<sup>th</sup>Institutional Assistance, Role of Government in promoting Entrepreneurship, MSME policy in India, Agencies for Policy Formulation and Implementation: District Industries Centers (DIC), Small Industries Service Institute (SISI), Entrepreneurship Development Institute of India (EDII), National Institute of Entrepreneurship & Small Business Development (NIESBUD), National Entrepreneurship Development Board (NEDB), Role of SIDBI.

**Unit 5<sup>th</sup>**Small Skills Unit, Dynamics of small business environment - Causes for small business failure - Success factors for small business, Women Entrepreneurship: Meaning, Characteristic features, Problems of Women Entrepreneurship in India, Developing Women Entrepreneurship in India, Incentive subsidiary. Recent emerging concepts like Atmanirbhar Bharat, Make in India.

- 1. S.S.KHANKA "Entrepreneurial Development" S.Chand& Co. Ltd. Ram Nagar New Delhi, 1999.
- 2. Hisrich R D and Peters M P, "Entrepreneurship" 5th Edition Tata McGraw-Hill, 2002.
- 3. E. Gordon & K. Natarajan Entrepreneurship Development Himalaya2008
- 4. Charantimath, Poornima, Entrepreneurship Development and Small Business Enterprises, Pearson Education, NewDelhi.
- 5. Hisrich, Robert D., Michael Peters and Dean Shepherded, Entrepreneurship, Tata McGraw Hill,ND
- 6. Sundar, K. *Entrepreneurship Development*. Vijay Nicole Imprints Private Limited, Chennai.

1. Segmentation Analytics: Market Segmentation Variables, Market Segmentation Types, Marketing Data

Landscape, Data for Segmentation, Analytics for Need Based Segmentation - Voice of the Customer, Managing

"Voice of the Customer" Data, Customer Co-Creation, RFM Analysis, Life Cycle Segmentation, Cross Tabulation

Segmentation, Regression based segmentation, Clustering, Conjoint Analysis Segmentation, The Cluster Analysis +

Discriminant Analysis Approach

2. Approaches to Choosing Target Segment/s: Rationale for Segment Targeting, Analytics for Perceptual Mapping

and Product Positioning, Product Positioning, Multi Dimensional Scaling (MDS) and Factor Analysis, Relevance of

Mapping for Product Positioning, Preference Mapping, Incorporating Preferences in Perceptual Mapping.

3. Analytics for Product/Service Design: The Relevance of Trade-off Approaches, Conjoint Analysis, Approaches

to Conjoint Analysis, Interpreting Conjoint Results, Optimizing Design using Conjoint Results.

4. Analytics for Tracking Customer Growth: Rationale for Customer Analytics, Customer acquisition cost,

Customer Churn, Customer Attrition models, Customer lifetime value, Net promoter score, Calculating the number

of new customers, Calculating average customer age & Days to convert, Calculating customer acquisition cost &

Average purchases, Calculating touch points & Lead conversion, Analyzing age demographics, First contact with

customer, Customer satisfaction, Understanding customer engagement, Diffusion Models - The Bass Model.

5. Modeling New Marketing Initiatives: Introduction to modeling, Evaluating new ad channels, Modeling tips

and best practices, Projecting ad revenue, Projecting organic follower revenue, Projecting expenses, Calculating net

profit and breakeven, Understanding ROI, Calculating returns, Creating a single-variable sensitivity table, Creating a

multi-variable sensitivity table.

## Suggested Text Books:

- 1. Marketing Analytics: Data-Driven Techniques with Microsoft Excel, Wayne L. Winston
- 2. Marketing Analytics: Strategic Models and Metrics, Stephan Sorger
- 3. Marketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques, Mike Grigsby
- 4. Cutting-edge Marketing Analytics: Real World Cases and Data Sets for Hands on Learning, Paul Farris, Rajkumar

Venkatesan, and Ronald T. Wilcox

- 1. Introduction & Concept: Disruptive Technological Era: Evolution of Industry Revolution 4.0 and aspect of HR, Big data in HR, understanding of Machine Learning, sensors and cloud computing, Business Intelligence in HR.
- 2. Importance of HR Analytics: Role and Responsibilities of HR Analytics, Framework of contemporary HR Analytics,- Predictive tools and Applications in solving problems using HR analytics. Gartners Analytics Maturity Model.
- 3. Innovation: Concept of innovation, Kinds of Innovation, Developing Innovative culture in an organization. HR analytics linkage to business outcomes, Measuring use of HR analytics impact on business outcome
- 4. Strategy Formulation: Redefining HR Policies and Practices, Robust competency mapping, understanding future of work and workplace, Decision framework. Use of HR analytics in workforce planning: talent acquisition, talent development, talent compensation, talent engagement and retention
- 5. Learning from Analysis: Case studies and best practices in use of HR Analytics in industry (5 cases)

## Suggested Text Books:

- 1. Winning on HR analytics: Leveraging data for competitive advantage, Ramesh Soundararajan and Kuldeep Singh, Sage Publication
- 2. The Practical Guide to HR Analytics: Using Data to Inform, Transform, and Empower HR Decisions Paperback, Shonna D. Waters , Valerie N. Streets , Lindsay Mcfarlane , Rachael Johnson-murray
- 3. Human Capital Analytics: How to Harness the Potential of Your Organization's Greatest Asset, Boyce Byerly, Gene Pease, and Jac Fitz-enz
- 4. Doing HR Analytics: A Practitioner's Handbook with R Examples, Lyndon, Mr. Sundmar, Createspace Independent Pub 5. The Power of People: Learn How Successful Organizations Use Workforce Analytics to Improve Business Performance, Guenole Nigel, Ferrar Jonathan, Feinzig Sheri, Pearson Publication

Basic Business Analytics Using R

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- 1. Business Analytics Basics: Definition of analytics, Evolution of analytics, Need of Analytics, Business analytics vs business analysis, Business intelligence vs Data Science, Data Analyst Vs Business Analyst, Types of Analytics, Tools for Analytics. Concept of insights. Importance of data in business analytics, Differences between data, information and knowledge, various stages of an organization in terms of data maturity, Options for organizations in the absence of good quality data.
- 2. Analytical decision-making: Analytical decision-making process, characteristics of the analytical decisionmaking process. Breaking down a business problem into key questions that can be answered through analytics, Characteristics of good questions, Skills of a good business analyst, Overview of Business analytics applications in Marketing Analytics, HR Analytics, Supply Chain Analytics, Retail Industry, Sales Analytics, Web & Social Media Analytics, Healthcare Industry, Energy Analytics, Transportation Analytics, Lending Analytics, Sports Analytics. Future of Business Analytics.
- 3. Fundamentals of R: R environment, Downloading and Installing R, Using command line in R, Help, File operations in R -Reading from and Writing to a file, Writing your first code in R, Importing data from spreadsheets, text files, SAS, SPSS, Connect to RDBMS from R using ODBC, basic SQL queries in R, Exploration and transformation activities, basics of Web Scraping.
- 4. Data types & Data Structures in R: Data types in R and its appropriate uses, Program Structure in R, Flow Control: For loop, If condition, While conditions and repeat loop, Debugging tools, Concatenation of Data, Combining Vars, cbind, rbind, Sapply, apply, tapply functions, Built-in functions in R like: seq(), cbind (), rbind(), merge(), knowledge on the various subsetting methods, summarize data by using functions like: str(), class(), length(), nrow(), ncol(), use of functions like head(), tail(), for inspecting data, summarize data, SQL join in R. Introduction to Data Structure in R, Vectors, Lists, Scalars, Data Frames, Matrices, Arrays, Factors, Use of data structures in different conditions, Advantage of using a particular approach. (10+3) 5. Data Visualization: Concept of Data Visualization, Popular Data Visualization tools, Exploratory Data Analysis(EDA), Data Cleaning, Data Inspection, uses of the functions like grepl(), grep(), sub(), summarize(), llist(), Using graphical functions in R for data visualization, Line Plots, Bar Plots, Bar Plots for Population, Pie chart, tableplot, histogram, Plotting with base graphics, Plotting with Lattice graphics, Plotting and coloring in R. Customizing Graphical Parameters to improvise plots, understanding GUIs like Deducer and R Commander, introduction to Spatial Analysis.

### Suggested Text Books:

- 1. R for Business Analytics, AOhri
- 2. Data Analytics using R, SeemaAcharya, TMGH
- 3. Data mining and business analytics with R, Johannes Ledolter. New Jersey: John Wiley & Sons.
- 4. Data Mining for Business Intelligence, Concepts, Techniques and Applications, Shmueli, Patel, and Bruce: Wiley

Suggested Reference Books:

- 1. Statistical data analysis explained: applied environmental statistics with R, Clemens Reimann. Chichester: John Wiley and Sons
- 2. Data science in R: a case studies approach to computational reasoning and problem solving, Deborah Nolan. Boca Raton: CRC Press
- 3. The analytics revolution: how to improve your business by making analytics operational in the big data era, Bill Franks. Hoboken: Wiley
- 4. Taming the big data tidal wave: finding opportunities in huge data streams with advanced analytics, Bill Franks. Hoboken: John Wiley & Sons.
- 5. Big data, big analytics: emerging business intelligence and analytic trends for today's business, Michael Minelli. Hoboken: John Wiley & Sons

## **Digital Marketing**

### **Objectives**

The objective of this paper is to create awareness about Digital Marketing and educate the learner about use of electronics in marketing management.

#### **Course Contents:**

## **Unit 1 Introduction to Digital Marketing and SEO**

The Significance of Digital Marketing, Digital Media, Digital v/s Traditional Marketing, Digital Marketing Trends and Platforms, Digital Marketing and Search Engine, Search Engine Optimization (SEO) concepts, Search Engine Architecture, Internal Measures for SEO, Do and Don't for Web Content, Link Building, Introduction to Digital Marketing Tools.

## **Unit 2 Networks of Digital Marketing**

Introduction to Ad-Word, Display Networks, Advertising on Display Networks, Image Advertising, Mobile Advertising, Video Advertising, YouTube Advertising, Keyword Research Methodology, Analysis and Tools for Digital Marketing Networks, Link Building Methodology and Strategies, Online Offline Integration

## **Unit 3 Search Engine Marketing**

Benefits of SEM, Google Ad-Words V/S Microsoft Ad-Center, Types of Campaign, Ad-Group and keywords setup, Direct Campaign V/S Branding Campaign, Campaign Setup, Understanding Ad-Words Bidding, Ad-Formats and Guidelines, Campaigns, Ad-groups and keywords Dashboard

### **Unit 4 Email and Mobile Marketing**

Importance of Email Marketing, Popular Email Marketing Software, Email Marketing Campaign, Newsletters in Email Marketing, Effective strategies for Email Marketing, Email Marketing Tools, Triggered Email Campaign, Mobile Marketing: Mobile Ad-Campaign, Mobile Ad-Formats, Mobile Website Configuration. Video Marketing using YouTube: Optimization of Videos, Tips and Tricks for promotion, YT Analytics, Monetizing YT Channel

### **Unit 5 Social Media Marketing**

Introduction to Social Media Marketing, Benefits of SMM, Social Media Strategy, Social Media Metrics in SEO, Face-book Marketing: setup, options, elements and applications; Twitter Marketing: #hash tags and its uses, analytics and promotions; Google+ Marketing: Benefits in SEO, Groups; LinkedIn Marketing: Strategy, Connection and Recommendations

- Damian Ryan and Calvin Jones, Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation, 2nd Edition, and ISBN:9780749453893.
- VinayakPatukale, Digital Marketing, KindleEdition

Retailing Analytics 46

Retailing in the Digital Era: New Age Retailing, Digital Consumers Characteristics interconnected, involved, interconnected, co-creation, collaboration, Customer Data – Big Data, Business Analytics, Customer Insights, Data Characteristics - Variety, Volume, Velocity, Veracity. Critical issues in Modern day Retail, The Digital organization, Retail analytics for decision making, Informed and Risk-Aware Decisions, Benefits of Retail Analytics - Informed Decisions, Risk mitigation, Gaining visibility, Retail Analytics for Strategic - Tactical and Operational decisions. (3) 2. Marketing in a Consumer-Driven Era: Understanding Consumer Buying Behavior and Trends, Leveraging customer data, Putting information in context, Clicking with consumer communities, Keeping content in mind, From personalization to commerce. (3) 3. Key Questions: What they are buying, Who they are, How they are buying, Where else they are buying? (3) SPPU - MBA Revised Curriculum 2019 CBCGS & OBE Pattern Page 112 of 115 4. Data sources: Customer, Retailer, Supplier, Market, Web, Mobile, Social, Call Centres,. (3) 5. Looking at Unstructured Data: The unstructured data challenge, Recognizing the untapped analytics opportunity, Customer-Driven Decision Making, Content Analytics in Action, Understanding Affinities between Products and Customers, Advanced affinity analysis, Market basket analysis, Understanding customer preferences, Anticipating the customer's next move, Improving Retail Promotions. (3) 6. Merchandising Analytics: Assortment planning ,GeoSpatial Analytics, Product placement, Space Optimisation, Product adjacency, Aligning store-level assortment with demand, Category Intelligence, Developing dynamic retail assortments, Prioritization of Product categories. (3) 7. Marketing Analytics: Marketing Mix ROI, Promotions - Promotional Maturity Curves, Pricing - Price per segment, Margin, Profitability, Personalisation, Campaigns, Marketing Return Curves, Scenario Analysis, Driving better P&L analyses, Managing Incentive Compensation. (3) 8. Supply Chain Analytics: Creating a Demand-Driven Supply Chain, Gaining Visibility across the Supply Chain, Resolving Operations Problems Premptively, Logistics, Inventory, Supplier performance, Demand forecasting, Vendor Intelligence, Vendor Rankings, Fulfillment Intelligence, Inventory Diagnostics, Shrinkage, Optimization opportunities. (3) 9. Store operations analytics: Using Analytics to Optimize Staffing Plans, Drilling into HR analytics, Customer Traffic, Store Performance Dashboards, Local Market Analytics, Online Offline Analytics, Sales Trends, Brand Performance, Account Performance Forecasts. (3) 10. Customer View: Customer Insights, Omni channel insights, Personalization, merchandise Data sources, including operations and supplier. (3) Suggested Text Books: 1. Retail Analytics – The Secret Weapon, Emmett Cox 2. Behaviour Analytics in Retail, Ronny Max 3. The Little Book on Big Data: Understand Retail Analytics Through Use Cases and Optimize Your Business, Mahogany Beckford 4. The New Science of Retailing: How Analytics are Transforming the Supply Chain and Improving Performance, Fisher and Raman 5. The Strategy and Tactics of Pricing: A Guide to Growing More Profitably, Nagle, Hogan and Zale, Prentice-Hall 6. Competing on Analytics, Davenport, Harris 7. The New Rules of Retail: Competing in the World's Toughest Marketplace, Lewis and Dart 8. Sales Promotions, Neslin, Marketing Science Institute

## **Competency Based Human Resource Management System**

Performance Management System: Introduction of PMS-Definition, Scope, Importance, Performance Planning – Individual Goal Setting, Linking individual goals to Organization goals, Performance Coaching- Identification of Training Needs- Job Specification, Identify the Performance Gap, Training Specification, Choose appropriate training module, Counselling for Better Performance, Feedback Mechanism in Organization. (6+3) 2. Introduction to Competency: Definition and History of Competency, Basic Components of Competency(Knowledge(K), Skill(S), Attitude(A)), Performance Vs Competency, Difference between Competence and Competency, Type of Competency- Generic Vs Key Competency, Functional and Technical Competency, Leadership and managerial Competency, Need for Competency Framework, Limitation and Learning from Competency Framework, Myth about Competency(6+3) 3. Competency Development & its Models: Need and Importance of Competency Development, Stages in developing Competency Model, Types of Competency Model - Core/Generic, Job Specific, Managerial/Leadership, Custom, Development of Personnel Competency Framework – Lancaster Model of Competency. (5+3) 4. Competency Mapping: Procedures/Steps-Determining objectives and Scope, clarifying implementation goals and standards, create an action plan, define competency based performance effectiveness (Key Result Area (KRA) & Key Performance Indicators(KPI)), tools for data collection, data analysis, validating competency model, mapping future jobs and single incumbent jobs, using competency profile in HR decisions, Mapping Competency for Recruitment and Selection, Training and Development, Performance and Compensation. (7+3) 5. Competency Driven Career and Culture: Role of Competency in Career Progression -Transactional Competency, Tradition Competency and Transformational Competency, Evaluation of Career through KSA (Knowledge, Skill and Attitude) Competency based Succession and Career planning, Corporate Competency driven Culture. (6+3) Suggested Text Books: 1. Competency based HRM, Ganesh Shermon, TataMcGraw Hill Publishing 2. The handbook of Competency Mapping: Understanding, Designing and Implementing Competency Models in Organizations, SeemaSanghi, Sage Publication Inc Suggested Reference Books: 1. Human Capital Measurement: An Introduction, K Sangeetha ICFAI University 2. Competency Mapping, R K Sahu 3. Competency Study: Mapping the Future, Paul R Bernthal, ASTD Press 4. Human resource Management, K Ashwathappa 5. Human Resource Management, L M Prasad 6. Human Resource Management, Gary Dessler

- An easy introduction to the concept of business valuation
- A complete overview of the existing business valuation models
- An understanding of the importance of various assumptions underlying the valuation models
- An easy-to-understand explanation of various business valuation techniques, with their pros and cons
- A discussion on valuation of assets and liabilities, whether tangible or intangible, apparent or contingent.
- Application of the concepts in real-life situations, with many examples.

### UNIT I

Mergers- types of merger – theories of mergers- operating, financial and managerial synergy of mergers – value creation in horizontal, vertical and conglomerate mergers – internal and external change forces contributing to M & A activities - Impact of M & A on stakeholders.

M&A – A strategic perspective- industry life cycle and product life cycle analysis in M&A decision, strategic approaches to M&A- SWOT analysis, BCG matrix, Porter's five forces model UNIT II

Corporate restructuring – significance - forms of restructuring – joint ventures – sell off and spin off – divestitures – equity carve out – leveraged buy outs (LBO) – management buy outs –master limited partnerships – Limited Liability Partnership (LLP) in India: Nature and incorporation of LLP-De merger- strategic alliance- buyback of shares-employee stockownership plans (ESOP) UNIT III

Merger Process: Dynamics of M&A process - identification of targets – negotiation – closing the deal. Five-stage model – Due diligence – Types - due diligence strategy and process – due diligence challenges. Process of merger integration – organizational and human aspects – managerial challenges of M & A

Takeovers, types, takeover strategies, - Takeover defenses – financial defensive measures – methods of resistance – anti-takeover amendments – poison pills UNIT IV

Methods of financing mergers – cash offer, share exchange ratio – mergers as a capital budgeting decision Synergies from M&A: Operating and Financial Synergy Accounting for amalgamation – amalgamation in the nature of merger and amalgamation in the nature of purchase- pooling of interest method, purchase method – procedure laid down under Indian companies act of 1956 UNIT V

Legal aspects of Mergers/amalgamations and acquisitions/takeovers- Combination and Competition Act- Competition Commission of India (CCI)- CCI Procedure in Regard to the transactions of Business Relating to combination of Regulations 2011- Scheme of Merger/Amalgamation-essential features of the scheme of Amalgamation-Approvals for the Scheme-Step wise procedure- Acquisitions/Takeovers- Listing agreement-The SEBI Substantial Acquisition of Shares and Takeover code.

### PRACTICAL COMPONENT:

Pick up any latest M&A deal. Generate the details of the deal and then study the deal in the light of the following.

- Nature of the deal: merger, acquisition, or takeover. If it is a merger, what type of merger is it?
- Synergies likely to emerge to the combining and the combined firm(s) from the deal
- The valuation for the merger
- The basis for exchange rate determination

## TEXTBOOK:

1. Business Analysis and Valuation, Krishna G. Palepu, Paul M. Healy, Cengage Publications

REFERENCES: 49

1. Business Valuation: An Integrated Theory, Z. Christopher Mercer, Travis W. Harms, Wiley Publications

- 2. Business Valuation Management, The Institute of Cost and Works Accountants of India
- 3. Mergers and Acquisitions: Strategy, Valuation and Integration, Kamal Ghosh Ray, PHI Publications

Advertising and Sales Promotion/ Integrated Marketing Communication

- 1. Integrated Marketing Communication: Integrated Marketing Communication, Evolution of Integrated Marketing Communication, Role of IMC in creating brand identity, brand equity, and customer franchise, Communication Process, Promotional Mix: Tools for IMC, The IMC Planning Process, Global IMC. The Value of IMC plans information technology, changes in channel power, increase in competition, brand parity, integration of information, decline in the effectiveness of mass-media advertising.
- 2. Advertising- I: (a) Definition, History, Roles and Functions of Advertising, Types of Advertising, Steps in Development of Advertisement. (b) Advertising Design: Appeals, Message Strategies & Execution Framework: Advertising Design, Advertising Theory, Types of Advertising Appeals, Structure of an Advertisement, Message Strategies, Cognitive strategies, Execution Strategies, Creating an Advertising, Advertising Effectiveness. (c) Copywriting: Meaning and Definition of Copywriting, The Copywriter, Copywriting for Print, Copywriting guidelines, Radio Copywriting, TV Copywriting, Writing for the Web, Tips for writing good web content.
- 3. Advertising- II: (a) Media Planning and Strategies: Growth and Importance of Media, Meaning and Role of Media Planning, Media Plan, Market Analysis, Media Objectives, Developing and Implementing Media Strategies, Evaluating the effectiveness. (b) Print Media and Outdoor media: Characteristics of the press, Basic media concepts, Newspapers, Magazines, Factors to consider for magazine advertising, Packaging, Out-of-home Advertising, Directory Advertising. (c) Broadcast and Internet Media: Meaning of Broadcast Media, Radio as Medium, Television as Medium, Internet Advertising, Email Advertising.
- 4. Sales Promotion: Scope and Role of Sales Promotion, Growth of Sales Promotion, Consumer Oriented Sales Promotion, Techniques in Sales Promotion, Trade Oriented Sales Promotion, Coordinating sales promotion and advertising; Sales promotion abuse; Personal selling.
- 5. Public Relations, Publicity and Corporate Advertising: Definition of Public Relations, Publicity and Corporate Advertising; Difference between public relations and advertising, Functions of Public Relations; Creating positive image building activities; Preventing or reducing image damage; Sponsorship and Event marketing; Role of internet in Public Relations, Publicity, Advantages and Disadvantages of Publicity.

### **Suggested Text Books:**

1. Advertising and Promotion, Belch, George and Belch, Michael, Tata McGraw Hill, New Delhi. 2. Integrated Advertising, Promotion and Marketing Communication, Clow, Kenneth & Black, Donald, Pearson Education, New Delhi. 3. Advertising Management, Jethwaney, Jaishree and Jain, Shruti, Oxford University Press, New Delhi. 4. Advertising and Promotions, Semenik Allen, Cengage Leaning 5. Advertising and Promotion, SHH Kazmi, SatishBatra, Excel Books 6. Advertising and Promotions, Shah, D'Souza, Tata McGraw Hill Suggested Reference Books: 1. Integrated Marketing Communication, Tom Duncan, McGraw-Hill 2. Integrated Marketing Communication: Trends and Innovations, Shridha Jain, Global India Publications 3. IMC, The Next Generation, Don Schultz and Heidi Schultz, Tata McGraw Hill, New Delhi.

## **E-Business Technologies and Trends**

## **Objectives**

The objective of this paper is to educate the learner about Trends and technologies of e-Business in various business sectors like marketing, governance, trading etc.

#### **Course Contents:**

## **UNIT 1 E- Marketing**

Marketplace v/s Market space, Impact of e-commerce on market, Marketing issues in e-marketing, Direct marketing, One-to-one marketing.

### **UNIT 2 E-Trading**

Areas of e-financing, E-Trading, Trading v/s e-trading, Importance and advantages of e-trading, Operational aspects of e-trading, E-Trading in India

## **Unit 3 E-Ticketing:**

Online booking systems, online booking procedure-Railways & Airlines, Tourist and Travel Industry, Hotels and Entertainment Industry

## **UNIT 4 E-Banking**

Concept, Traditional v/s E-banking, Indian E-Banking Environment, Production and Distribution in E-Banking, Key Issues in E-Banking, Future of E-Banking.

#### **UNIT 5E-Governance**

Overview of E-Governance, E-Governance Strategies, E-Governance in Rajasthan/India, Government Portals and Enterprises, E-Governance in Global Scenario.

- E-government: From Vision To Implementation: A Practical Guide With Case Studies by SubhashBhatnagar
- E-Governance in India: Issues and Cases by JayShree Bose, ICFAIPublication
- E-Banking in India: Issues and Cases by JayShree Bose, ICFAIPublication

## **Business Process Re-engineering**

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- 1. Introduction to Business Process Reengineering (BPR): Definition of business processes Concept of BPR Definition of business process redesign, BPR Evolution, Definition, Need for reengineering, Benefits, Role of leader & manager, Breakthrough reengineering model, BPR guiding principles, Business process reengineering & performance improvement, Key targets of BPR, Myths about BPR, What reengineering isn't, BPR and other management concepts:
- TQM, Quality function deployment, ISO standards, ERP. BPR and Process Simplification, BPR and Continuous Improvement.
- 2. Business vision and process objectives: The Key Elements of BPR, Develop a Vision, Establish a Responsible Team, Prepare the Organization for Change, Redesign the Business Process, Case Studies. Business Processes, People, Information Technology. Processes to be redesigned, selection criteria, dysfunction, importance feasibility. Measuring existing processes, BPR Goals Cycle time reduction, Cost reduction, Quality improvement, Customer Satisfaction, BPR

team characteristics.

3. Enablers of BPR: Enablers of BPR in manufacturing – Agile Manufacturing, Lean Manufacturing, JIT,

Collaborative Manufacturing, Intelligent Manufacturing, Production Planning, Product design & development.

Relationship between BPR and information technology, Role of information technology in reengineering, Criticality of IT

in business process.

4. BPR implementation methodology: Different BPR Methodologies, Different Phases of BPR, Relationship between BPR phases, Tools used in Modelling the Business - flow-charting, business activity maps, relational diagrams,

benefit/cost analysis, Process Modelling, Notations, Case Studies. BPR KPIs Definition, Measuring KPIs, Methodologies (Common Assessment Framework (CAF), Balanced Scorecard), Case Studies. (6)

5. Change Management: The Power of Habit in organizations, Planned changes in business reengineering

projects; Factors relating to change management systems and culture, Committed and strong leadership, Factors relating to organizational structure, Factors related to BPR program management, Factors related to IT infrastructure, Factors Relating to BPR Failure, Problems in communication and organizational resistance, Lack of organizational

readiness for change, Problems related to creating a culture for change, Lack of training and education, Factors related to management support, Ineffective BPR teams, A framework for barrier management.

## **Suggested Text Books:**

1. Hammer, M. and Champy, J, Re-engineering the Corporation: A Manifesto for Business Revolution, Harper

**Business** 

- 2. R. Radhakrishnan S. Balasubramanian, Business Process Reengineering, PHI
- 3. VikramSethi and William R. King, Organisational Transformation through Business Process Reengineering, Pearson
- 4. K. Shridhara Bhatt, Business Process Reengineering, Himalaya Publications
- 5. Hammer, M. and Stanton, S.A, The Re-engineering Revolution, Harper Business Suggested Reference Books:
- $1.\ Harmon,\ P$  , Business Process Change : A Guide for Business Managers and BPM and Six Sigma Professionals,

Elsevier/Morgan Kaufmann Publishers.

2. Kock, N.F., Process Improvement and Organizational Learning: The Role of Collaboration Technologies, Idea Group.

- 3. R. Anupindi et al., Managing Business Process Flows: Principles of Operations Management, Pearson Education Inc.
- 4. Walford, R.B., Business Process Implementation for IT Professionals and Managers, Artech House.
- 5. Henry J Johansson, H J Johansson, Mo, Business Process Reengineering, Wiley

### UNIT I – INTRODUCTION TO ADVERTISEMENT

Concept and definition of advertisement –Social, Economic andLegal Implications of advertisements –setting advertisement objectives –Ad. Agencies –Selection and remuneration – Advertisement campaigns.

#### UNIT II – ADVERTISEMENT MEDIA

Media plan –Type and choice criteria –Reach and frequency of advertisements –Cost of advertisements –related to sales –Media strategy and scheduling.

### UNIT III – DESIGN AND EXECUTION OF ADVERTISEMENTS

Message development –Different types of advertisements –Layout –Design appeal –Copy structure –Advertisement production –Print –Radio.T.V.and Web advertisements –Media Research –Concept Testing–Measuring the impact of advertisements.

### UNIT IV – INTRODUCTION TO SALES PROMOTION

Scope and role of sale promotion –Definition –Objectives of sales promotion – sales promotion techniques –Trade-oriented and consumer-oriented.

UNIT V – SALES PROMOTION CAMPAIGN Sales promotion –Requirement identification Designing of sales promotion campaign –Involvement of salesmen and dealers – Outsourcing sales promotion national and international promotion strategies – Integrated promotion – Coordination within the various promotion techniques –Online sales promotions

- Semenile, Allen, O'Guinn, Kaufman Advertising, and Sales Promotions An Integrated Brand Approach -6th Bedition, Cengage Learning. (2012).
- Kenneth Clow. Donald Baack, Integrated Advertisements, Promotion, and Marketing Communication, Prentice Hall of India, New Delhi, 6th edition, 2013.
- S. H. H. Kazmi and Satish K Batra, Advertising & Sales Promotion, Excel Books, New Delhi, 2nd edition, 2008.
- George E Belch and Michel A Belch, Advertising & Promotion, McGraw Hill, Singapore, 7th edition, 2011.
- Julian Cummings, Sales Promotion, Kogan Page, London 2003.
- E. Betch and Michael, Advertising and Promotion, McGraw Hill, 7th edition, 2003.
- JaishriJefhwaney, Advertising Management, Oxford, 2013.
- V.S.Padmanabhan, H.S.Murthy. Advertising and Sales Promotion (An Indian Perspective) Anes Books Pvt.Ltd -2011.

## **Introduction to Wordpress Development**

- 1. A brief overview of how WordPress works: An introduction to how a web server works with WordPress, The WordPress file system, Creating basic things like posts, pages, and users, and changing settings, Permalinks, and how they work with the rewrite module on both Apache and Nginx, How a dashboard page request loads, How a front-end page request loads
- 2. The programming languages of WordPress: HTML, Introduction to Accessibility, CSS, JavaScript, PHP, MySQL
- 3. WordPress development fundamentals: Setting up a local development environment, Action Hooks and Filter Hooks, The WordPress database, WordPress coding standards, Enabling the debug.log
- 4. An introduction to developing WordPress themes: Classic themes vs block themes, Theme requirements, Templates and template parts, The WordPress Template Hierarchy, Classic themes Template tags and conditional tags, Block themes patterns, Block themes theme.json, Enqueuing CSS and JavaScript, Custom functions
- 5. An introduction to developing WordPress plugins: Plugin requirements, Creating custom post types and taxonomies, Using post meta, Enqueuing CSS and JavaScript, Introduction to developing plugins securely, Preventing common vulnerabilities

Business Intelligence 56

## **Unit 1: Understanding Business Intelligence**

The Challenge of Decision Making, What Is Business Intelligence?, The Business Intelligence Value Proposition, The Combination of Business and Technology

## **Unit 2: Business Intelligence Technology Counterparts**

Data Warehousing, What Is a Data Warehouse?, Data Marts and Analytical Data, Organization of the Data Warehouse, Enterprise Resource Planning, Distributing the Enterprise, First ERP, then Business Intelligence, The Current State of Affairs, Customer Relationship Management, CRM, ERP, and Business Intelligence, Customer Decisions, Decisions About Customers, Business Intelligence and Financial Information

## Unit 3: The Spectrum of Business Intelligence

Enterprise and Departmental Business Intelligence, Strategic and Tactical Business Intelligence, Power and Usability in Business Intelligence, Finding the Right Spot on the Continuum, Business Intelligence: Art or Science?

## **Unit 4: Business Intelligence User Interfaces**

Querying and Reporting, Reporting and Querying Toolkits, Basic Approaches, Building Ad-Hoc Queries, Building On-Demand Self-Service Reports, Enhancing and Modifying Data Access, Pull-Oriented Data Access, Push-Oriented Data Access Dashboards, EIS Is the Engine, Metric System and KPIs, Business Intelligence Dashboards Briefing Books

### **Unit 5: On-Line Analytical Processing (OLAP)**

- What Is OLAP? :OLAP and OLTP, Operational Data Stores, Variations in Data and Approach
- OLAP Applications and Functionality

Multi-Dimensions: Thinking in More Than Two Dimensions, What Are the Possibilities?, Drilling and Pivoting

- OLAP Architecture: Cubism, Tools, ROLAP, MOLAP, HOLAP
- Data Mining: What Is in the Mine?, Start with a Question, Examples

### **Emotional Intelligence**

Unit 1. Introduction to Emotional Intelligence (EI) 1.1: What is EI, EQ & IQ 1.2: Historical Roots of Multiple Intelligences & EI 1.3: Power of Emotions 1.4: The Emotional Brain & Amigdala Hijack 1.5: Physiology of Emotions 1.6: Application of Physiology of Emotions

Unit 2. Building Blocks of Emotional Intelligence 2.1: Ability Based Model (Mayer &Salovey) 2.1.1: Perception 2.1.2: Employment 2.1.3: Comprehension 2.1.4: Management 2.2: Trait Model of Self-Efficacy (K.V. Petrides) 2.3: Mixed Model (Daniel Goleman) 2.3.1: Personal Competence (Self Awareness, Self Management Motivation) 2.3.2: Social Competence (Empathy & Social Skills) 2.4: Empathy 2.4.1: Understanding Empathy 2.4.2: Importance of Empathy 2.5: Application of Self-Efficacy of EI.

Unit 3. Aspects & Impact of Fundamental Elements of Emotional Intelligence 3.1: Seven Elements defined in Behavioral terms:3.1.1: Self Awareness 3.1.2: Emotional Resilience 3.1.3: Motivation 3.1.4: Interpersonal Sensitivity 3.1.5: Influence 3.1.6: Intuitiveness 3.1.7: Conscientiousness 3.2: Five Elements defined in Competence terms: 3.2.1: Self Awareness 3.2.2: Self Management 3.2.3: Self Motivation 3.2.4: Empathy 3.2.5: Social Skills 3.3. Application of Impact of fundamental elements of EI in our daily life 3.3.1: Everyday Behaviour 3.3.2: Education 3.3.3: Workplace 3.4: Case Study Discussion with Role Plays Unit 4. Measuring Emotional Intelligence &Behavioural EQ 4.1: Initial Self-Assessment on EI Elements (Internal) 4.2: 360 degree Assessment Map 4.3: EI Behavioural Test (External) 4.4: Behavioural EQ 4.4.1: Measuring Behaviour EQ 4.4.2: DISC Test 4.4.3: Role Play on DISC Behaviour Identification Books

Unit 5: Strategies to Improve Social Skills 4.1: Elements of Social Skills 4.1.1: Influence 4.1.2: Communication 4.1.3: Conflict Management 4.1.4: Leadership 4.1.5: Change Catalyst 4.1.6: Building Bonds 4.1.7: Collaboration & Cooperation 4.1.8: Developing Team Capabilities 4.1.9: Empathy 4.2: Social Connect 4.2.1: Remembering Names 4.2.2: Observation of Vital Clues 4.2.3: Body Language 4.2.4: Listen Actively 4.2.5: Their Point of View 4.2.6: The Law of Self-Image 4.3: Social Character Building 4.3.1: The Law of Authenticity 4.3.2: The Law of Energy & Positive Vibrations 4.3.3: Be Intentionally Present 4.3.4: Be Curious 4.3.5: Show that You Care 4.3.6: Keep Your Word 4.3.7: Gratitude 4.3.8: The Law of Patience 4.3.9: Celebrate / Have Fun 4.4: Social Intelligence 4.4.1: The Law of Perception & Context Understanding 4.4.2: Focus on Big Picture 4.4.3: The Law of Similarity 4.4.4: The Law of Familiarity 4.4.5: Accept 4.4.6: Find the Good & Appreciate 4.4.7: Be in a Moment 4.4.8: Work Together / Collaborate 4.4.9: Resource Development & Utilisation 4.4.10: The Law of Giving 4.5: Case Study Discussion with Role Play

Suggested Books for Reading: Working with Emotional Intelligence: Bloomsbury PublicationDanielGoleman (1998) Games People Play: The Basic Handbook of TA: Eric Berne (1964) The Language of Emotional Intelligence: The Five Essential Tools for Building Powerful and Effective Relationships: Jeanne Segal 45-15 (2008) The Brain and Emotional Intelligence: New Insights: Daniel Goleman HBR's 10 Must Reads on Emotional Intelligence (2015)

#### **BIG DATA ANALYTICS**

OBJECTIVES:  $\bullet$  To optimize business decisions and create competitive advantage with Big Data  $\bullet$ analytics • To explore the fundamental concepts of big data analytics. • To learn to analyse the big data using intelligent techniques. • To understand the various search methods and visualization techniques. • To learn to use various techniques for mining data stream. • To understand the applications using Map Reduce Concepts. • To introduce programming tools PIG & HIVE in Hadoop echo system. UNIT I Introduction to big data: Introduction to Big Data Platform - Challenges of Conventional Systems - Intelligent data analysis - Nature of Data - Analytic Processes and Tools - Analysis vs Reporting. UNIT II Mining data streams: Introduction To Streams Concepts - Stream Data Model and Architecture - Stream Computing -Sampling Data in a Stream - Filtering Streams - Counting Distinct Elements in a Stream - Estimating Moments – Counting Oneness in a Window – Decaying Window - Real time Analytics Platform(RTAP) Applications - Case Studies - Real Time Sentiment Analysis- Stock Market Predictions. UNIT III Hadoop: History of Hadoop- the Hadoop Distributed File System - Components of HadoopAnalysing the Data with Hadoop- Scaling Out- Hadoop Streaming- Design of HDFS-Java interfaces to HDFS Basics-Developing a Map Reduce Application-How Map Reduce WorksAnatomy of a Map Reduce Job run-Failures-Job Scheduling-Shuffle and Sort - Task execution - Map Reduce Types and Formats- Map Reduce Features - Hadoop environment. UNIT IV Frameworks: Applications on Big Data Using Pig and Hive - Data processing operators in Pig - Hive services - HiveQL - Querying Data in Hive fundamentals of HBase and ZooKeeper - IBM InfoSphereBigInsights and Streams. UNIT V Predictive Analytics- Simple linear regression- Multiple linear regression- Interpretation of regression coefficients. Visualizations - Visual data analysis techniques - interaction techniques - Systems and applications.

TEXTBOOK: 1. Michael Berthold, David J. Hand, "Intelligent Data Analysis", Springer, 2007. 2. Tom White "Hadoop: The Definitive Guide" Third Edition, O'reilly Media, 2012.

Unit-I: Introduction to Technology Management: Concept and Meaning of Technology and Technology Management, Nature of Technology Management

Unit-II: Evolution and Growth of Technology, Role and Significance of Technology Management, Impact of Technology on Society and Business Technology and competition

Unit-III: Key issues in managing technological innovation, Forms of Technology Process technology; Product technology. Technology Forecasting Process, Need and Role of Technology Forecasting, Forecasting Methods and Techniques, Planning and Forecasting

Unit-IV: Technology Adoption, Technology Diffusion of technology diffusion; Perspectives of innovation diffusion process; Activities necessary for diffusion process, Technology Absorption Role of technology absorption; Benefits of technology absorption;

Unit-V: Constraints in technology absorption. Integration of People and Technology, Factors Considered in Technology Management Organisational factors; Psychological factors, Organizational Structure and Technology

Unit – I Overview of Product Photography - Product Photography significance – role in promotion of products - categorization of products – The lighting Equipment – Types of lighting units – Accessories – Digital Lights - Study of Concepts – Accessories - Props – Backgrounds - Models – Locations – hiring of studios – equipment.

Unit – II Electronics Products - Shooting Script – Lighting Schemes – Exercises.

Unit – III House Hold Products - Shooting Script – Lighting Schemes – Exercises Liquid Products – Shooting Script – Lighting Schemes – Exercises.

Unit – IV Executive Products - Shooting Script – Lighting Schemes – Exercises. - Concept Photography - Shooting Script – Lighting Schemes – Exercises

Unit – V . Industrial Photographer – Lighting in Natural & Artificial

**Suggested Books for Reading**: 1. New Product Shots by Alex Larg& Jane Wood. 2. Lighting for Food & Drink by Steve Bavister. 3. Practical Photography by Michael Freeman. 4. Magazines vide WEB. 5. Magazines on Advertising.

**Businesses in emerging markets** 

Course Objectives The course offers a comprehensive look at emerging markets, especially (but not only) the BRIC countries (Brazil, Russia, India, China), as they integrate with the global economy. We offer a conceptual framework to analyze emerging markets from multiple perspectives: that of indigenous entrepreneurs struggling to overcome constraints to build world-class businesses, that of multinationals from developed countries tapping into emerging markets for their next growth spurt, and that of domestic and foreign investors seeking to profit from investment opportunities in emerging markets.

#### **Course Content**

Unit I Introduction Overview of emerging markets, Political, legal and cultural framework in emerging markets, Ethical issues, Trade and foreign Investment, Demographic characteristics, Market characteristics, Factors effecting international business,

Unit II The Economic Environment Differences in economic environment in emerging markets, Institutional voids, framework and developing institutions, Infrastructure & infrastructural gap, Income distribution, Business Groups,

Unit III Opportunities and Trend in Emerging Markets The growth of middle income and rise in consumption level, Growth of mid-sized cities, rural development, Services, technology and telecommunication, inequalities, taking advantage and adopting business models, Business at the bottom of pyramid.

Unit IV Strategies for the Entry An overview for the entry in emerging market, Trade based entry strategies, export, Bidding for global tenders, global sourcing and outsourcing, contract based entry strategy, licensing, franchising, technology transfer projects, management contracts, Investment entry modes-marketing subsidiaries, joint ventures, wholly owned entry strategy, Factors influencing entry strategy

Unit V An Analysis of Selected Emerging Markets BRIC Economies- Brazil, Russia, India, China New frontier economies in Latin America- Mexico, Chile, Peru Emerging economies of CIS countries Emerging economies of Africa Other emerging Economies in Eastern Europe

**Suggested readings •** TarunKhanna, Krishna G. Palepu. 2010. Winning in Emerging Markets: A Road Map for Strategy and Execution. Harvard Business Press.

- "Doing Business in Emerging Markets" 2nd edition, by S Tamer Cavusgil, Pervez N Ghauri, Ayse A. Akcal 2012 published SAGE Publications Ltd.
- "International Business Strategy in Emerging Country Markets: The Institutional Network Approach" by Hans Jansson published by Edward Elgar Publishing House 2008.
- "Emerging Markets Rule: Growth Strategies of the New Global Giants", by Mauro Guillen, Esteban Garcia-Canal published by McGraw Hill Professional 3013.
- "Emerging Markets: Lessons for Business Success and the Outlook for Different Markets" by NenadPacek, Daniel Thorniley published by The Economist in association with Profile book Ltd 2007.
- "The Global Emerging Market: Strategic Management and Economics" By Vladimir Kvin published by Rouledge 2009

Programming Lab 62

## **Objectives**

It provides the participants an opportunity to study the hands-on implementation of a web page and web application in commercial environment.

### Course Contents:

Unit 1

Using of various tags for designing Static Web Pages, Building simple page, Formatting pages,

Use of images, Links, Lists, Frames, Tables, Forms. DHTML, Java Script and VBScript Implementation in Web Page.

Configuring IIS Web Server: Installing IIS, Publishing a web-site, creating virtual directory.

Configuring Apache Server: Installing Apache, Configuring MY SQL and PHP

Development of web site and web application With ASP/ ASP.Net

- Teach Yourself HTML 4.0 with XML, DHTML and Java Script by Stephanie, Cottrell, Bryant; IDG Books India Pvt. Ltd., New Delhi
- Active Server Pages (ASP) by Keith Morneau Jill Batistick Web Warrier Series, Vikas Publishing House Pvt. Ltd., New Delhi
- ASP Unleashed Tech Media Publication
- Web enabled commercial application development using HTML, DHTML, Javascript by Ivan Bayross, BPB

# **SEO Training**

- Unit 1: Introduction to SEO (Understanding the Basics of SEO), Technical SEO, Keyword Research
- Unit 2: Content Planning and Creation, On-Page SEO, Off-page SEO
- Unit 3: Avoid Negative SEO, Ecommerce SEO, Local SEO
- Unit 4: YouTube SEO, Analysis
- Unit 5: Certification

## **Social Media Marketing**

Unit – I Introduction – Evolution of Digital Marketing, Importance, Scope, The Digital Consumer & Communities Online, Digital Marketing Landscape

Unit – II Social Media Marketing: Adwords, ORM, Search Engine Marketing, PPC and Online Advertising, Social Media Marketing, Social Media Strategy & Customer Engagement

Unit – III Affiliate Marketing: Affiliate Marketing & Strategic Partnerships, Affiliate Marketing Networks, Promoting the Affiliate Products, Social Affiliate, Email Marketing, Content Strategies Unit – IV Analytics: CRM & CX in Digital Marketing-Digital Marketing, Data and Analytics-Social Listening- Web Analytics.

Unit – V Integrating Digital & Social Media: Social Media Analytics – Mobile Marketing – Integrating Digital and Social Media Strategies

### Suggested Readings:

Michael Solomon and Tracy Tuten, Social Media Marketing, Pearson, 2013

Social Media Marketing for Beginners: Create Successful Campains, Gain more Fans and boost sales from any social network by F.R.Media, 2/e, June 2014

Jan Zimmerman and Deborah Ng. Social Media Marketing All in one for Dummies, 2012

Douglas A.Norman, The Design of Everyday Things, Apr, 2011

Jack Z.Scissors and Roger B.Baron Advertising Media Planning, 2010

Bhatia Punit, Fundamentals of Digital Marketing, Pearson, 2017

Ian Doodson, The Art of Digital Marketing: The Definitive Guide to Creating Strategic, Targeted, and Measurable Online Campaign, Wiley, 2016

#### FINANCIAL ANALYTICS

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Unit: I Introduction: Meaning-Importance of Financial Analytics uses-Features-Documents used in Financial Analytics: Balance Sheet, Income Statement, Cash flow statement-Elements of Financial Health: Liquidity, Leverage, Profitability. Financial Securities: Bond and Stock investments - Housing and Euro crisis - Securities Datasets and Visualization - Plotting multiple series. Unit: II Using Excel to Summarize Data, Slicing and Dicing Financial Data with PivotTables, Excel Charts to Summarize Marketing Data. Excel Functions to Summarize Data, Pricing Analytics, Risk based pricing, Fraud Detection and Prediction, Recovery Management, Loss Risk Forecasting, Risk Profiling, Portfolio Stress Testing. Unit: III Descriptive Analytics, Data Exploration, Dimension Reduction and Data Clustering Geographical Mapping Market Basket Analysis. Predictive Analytics Fraud Detection Churn Analysis Crime Mapping, Content Analytics Sentiment Analysis Unit: IV Forecasting Analytics Estimating Demand Curves and Optimize Price, Price Bundling, Non Linear Pricing and Price Skimming, Forecasting, Simple Regression and Correlation Multiple Regression to forecast sales. Modelling Trend and Seasonality Ratio to Moving Average Method, Winter's Method UNIT - V Analyzing financial data and implement financial models using R. Process of Data analytics using R: obtaining publicly available data, refining such data, implement the models and generate typical output, Prices and individual security returns, Portfolio returns, Risks, Factor Models

## **Suggested Readings:**

Analysis of Economic Data, Gary Koop, (4th Edition), Wiley.

Statistics and Data Analysis for Financial Engineering: with R examples; David Ruppert, David S. Matteson, Springers.

Analyzing Financial Data and Implementing Financial Models Using 'R', Ang Clifford, Springers. Microsoft Excel 2013: Data Analysis and Business Modeling, Wayne L. Winston, Microsoft Publishing

# **Major Research Project**

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Major Research Project study shall commence in the **beginning of fourth semester** and will have two papers weight. It may be Industry oriented internship cum project or departmentally allocated research project