

ANNA UNIVERSITY, CHENNAI
NON-AUTONOMOUS COLLEGES AFFILIATED TO ANNA UNIVERSITY
MASTER OF BUSINESS ADMINISTRATION
REGULATIONS – 2021
CHOICE BASED CREDIT SYSTEM

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs) :

MBA programme curriculum is designed to prepare the post graduate students

- I. To have a thorough understanding of the core aspects of the business.
- II. To provide the learners with the management tools to identify, analyze and create business opportunities as well as solve business problems.
- III. To prepare them to have a holistic approach towards management functions.
- IV. To inspire and make them practice ethical standards in business.

PROGRAMME OUTCOMES (POs):

On successful completion of the programme,

1. Ability to apply the business acumen gained in practice.
2. Ability to understand and solve managerial issues.
3. Ability to communicate and negotiate effectively, to achieve organizational and individual goals.
4. Ability to understand one's own ability to set achievable targets and complete them.
5. Ability to fulfill social outreach
6. Ability to take up challenging assignments

PROGRESS THROUGH KNOWLEDGE

ANNA UNIVERSITY, CHENNAI
NON-AUTONOMOUS COLLEGES AFFILIATED TO ANNA UNIVERSITY
REGULATIONS – 2021
MASTER OF BUSINESS ADMINISTRATION (FULL – TIME)
CHOICE BASED CREDIT SYSTEM
CURRICULA AND SYLLABI FOR I TO IV SEMESTERS

SEMESTER - I

SEMESTER I								
SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.	BA4101	Statistics for Management	PCC	3	0	0	3	3
2.	BA4102	Management Concepts and Organizational Behavior	PCC	3	0	0	3	3
3.	BA4103	Managerial Economics	PCC	3	0	0	3	3
4.	BA4104	Accounting for Decision Making	PCC	3	0	0	3	3
5.	BA4105	Legal Aspects of Business	PCC	3	0	0	3	3
6.	BA4106	Information Management	PCC	3	0	0	3	3
7.		Non-Functional Elective	NEC	3	0	0	3	3
PRACTICAL								
8.	BA4111	Indian ethos (Seminar)	EEC	0	0	4	4	2
9.	BA4112	Business Communication (Laboratory)	EEC	0	0	4	4	2
TOTAL				21	0	8	29	25

NOTE: In the first semester students need to choose one elective from the Non-Functional stream

PROGRESS THROUGH KNOWLEDGE

SEMESTER – II

SEMESTER II								
SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.	BA4201	Quantitative Techniques for Decision Making	PCC	3	0	0	3	3
2.	BA4202	Financial Management	PCC	3	0	0	3	3
3.	BA4203	Human Resource Management	PCC	3	0	0	3	3
4.	BA4204	Operations Management	PCC	3	0	0	3	3
5.	BA4205	Business Research Methods	PCC	3	0	0	3	3
6.	BA4206	Business Analytics	PCC	3	0	0	3	3
7.	BA4207	Marketing Management	PCC	3	0	0	3	3
PRACTICAL								
8.	BA4211	Business Ethics (Seminar)	EEC	0	0	4	4	2
9.	BA4212	Data analysis and Business Modelling (Laboratory)	PCC	0	0	4	4	2
TOTAL				21	0	8	29	25

Summer internship – minimum of 4 weeks of internship

The report along with the company certificate should be submitted within the two weeks of the reopening date of 3rd semester. The report should be around 40 pages. The report should be sent to the Controller of Examinations by the HOD through the Principal, before the last working day of the 3rd Semester.

SEMESTER - III

SL. NO.	COURSE CODE	COURSE TITLE	CATEG ORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.	BA4301	Strategic Management	PCC	3	0	0	3	3
2.	BA4302	International Business	PCC	3	0	0	3	3
3.		Professional Elective I	PEC	3	0	0	3	3
4.		Professional Elective II	PEC	3	0	0	3	3
5.		Professional Elective III	PEC	3	0	0	3	3
6.		Professional Elective IV	PEC	3	0	0	3	3
7.		Professional Elective V	PEC	3	0	0	3	3
8.		Professional Elective VI	PEC	3	0	0	3	3
PRACTICAL								
9.	BA4311	Creativity and Innovation Laboratory	EEC	0	0	4	4	2
10.	BA4312	Summer Internship	EEC	0	0	4	4	2
TOTAL				24	0	8	32	28

SEMESTER - IV

SI. NO	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
PRACTICAL								
1.	BA4411	Project Work	EEC	0	0	24	24	12
TOTAL				0	0	24	24	12

TOTAL :90 CREDITS

NON FUNCTIONAL ELECTIVES (2 electives)

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	BA4032	Entrepreneurship Development	NEC	3	0	0	3	3
2.	BA4033	Event Management	NEC	3	0	0	3	3

PROFESSIONAL ELECTIVES (PEC)**FUNCTIONAL SPECIALISATIONS**

- Students can take three elective subjects from **two functional** specializations
Or
- Students can take six elective subjects from any **one sectoral** specialization

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
Stream/ Specialization : Financial Management [7]								
1.	BA4001	Security Analysis and Portfolio Management	PEC	3	0	0	3	3
2.	BA4002	Financial Markets	PEC	3	0	0	3	3
3.	BA4003	Banking and Financial Services	PEC	3	0	0	3	3
4.	BA4004	Financial Derivatives	PEC	3	0	0	3	3
5.	BA4005	Financial Modelling	PEC	3	0	0	3	3
6.	BA4006	International Finance	PEC	3	0	0	3	3
7.	BA4007	Behavioral Finance	PEC	3	0	0	3	3
Stream/ Specialization : Marketing Management [7]								
8.	BA4008	Retail Marketing	PEC	3	0	0	3	3
9.	BA4009	Consumer Behavior	PEC	3	0	0	3	3
10.	BA4010	Integrated Marketing Communication	PEC	3	0	0	3	3
11.	BA4011	Services Marketing	PEC	3	0	0	3	3
12.	BA4012	Sales and Distribution Management	PEC	3	0	0	3	3
13.	BA4013	Product and Brand Management	PEC	3	0	0	3	3
14.	BA4014	Digital Marketing	PEC	3	0	0	3	3

Stream/ Specialization : Human Resource Management [6]								
15.	BA4015	Strategic Human Resource Management	PEC	3	0	0	3	3
16.	BA4016	Industrial relations and labour legislations	PEC	3	0	0	3	3
17.	BA4017	Organizational, design, change and development	PEC	3	0	0	3	3
18.	BA4018	Negotiation and conflict management	PEC	3	0	0	3	3
19.	BA4019	Reward and Compensation management	PEC	3	0	0	3	3
20.	BA4020	International Human Resource Management	PEC	3	0	0	3	3
Stream/ Specialization : Operations Management [6]								
21.	BA4021	Supply Chain Management	PEC	3	0	0	3	3
22.	BA4022	Quality Management	PEC	3	0	0	3	3
23.	BA4023	Materials Management	PEC	3	0	0	3	3
24.	BA4024	Services Operations Management	PEC	3	0	0	3	3
25.	BA4025	Supply Chain Analytics	PEC	3	0	0	3	3
26.	BA4026	Project Management	PEC	3	0	0	3	3
Stream/ Specialization : Business Analytics [5]								
27.	BA4027	Data Mining for Business Intelligence	PEC	3	0	0	3	3
28.	BA4028	Deep Learning and Artificial Intelligence	PEC	3	0	0	3	3
29.	BA4029	Social media web Analytics	PEC	3	0	0	3	3
30.	BA4030	E-Business Management	PEC	3	0	0	3	3
31.	BA4031	Enterprise Resource Planning	PEC	3	0	0	3	3

SECTORAL SPECIALIZATIONS

1. Students can take three elective subjects from two functional specializations
or
2. Students can take six elective subjects from any one sectoral specialization

(a) Logistics and Supply Chain Management

(b) Infrastructure and Real Estate Management

(c) Tourism Management

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
Sectoral Specialization: Logistics and Supply Chain Management								
1.	BA4051	Supply Chain Concepts and Planning	PEC	3	3	0	0	3
2.	BA4052	Sourcing and Supply Management	PEC	3	3	0	0	3
3.	BA4053	Supply Chain Inventory Management	PEC	3	3	0	0	3
4.	BA4054	Supply Chain Information System	PEC	3	3	0	0	3
5.	BA4055	Warehouse Management	PEC	3	3	0	0	3
6.	BA4056	Transportation and Distribution Management	PEC	3	3	0	0	3
7.	BA4057	Reverse and Contract Logistics	PEC	3	3	0	0	3
8.	BA4058	Air Cargo Management	PEC	3	3	0	0	3
9.	BA4059	Containerization and Allied Business	PEC	3	3	0	0	3
10.	BA4060	Exim Management	PEC	3	3	0	0	3
11.	BA4061	Fundamentals of Shipping	PEC	3	3	0	0	3
12.	BA4062	Port and Terminal Management	PEC	3	3	0	0	3
Sectoral Specialization :Infrastructure and Real Estate Management								
13.	BA4063	Infrastructure Planning Scheduling and Control	PEC	3	3	0	0	3
14.	BA4064	Contracts and Arbitration	PEC	3	3	0	0	3
15.	BA4065	Project Management for Infrastructure	PEC	3	3	0	0	3
16.	BA4066	Management of Human Resources, Safety and Quality	PEC	3	3	0	0	3
17.	BA4067	Disaster Mitigation and Management	PEC	3	3	0	0	3
18.	BA4068	Economics and Financial Management in Construction	PEC	3	3	0	0	3
19.	BA4069	Urban Environmental Management	PEC	3	3	0	0	3
20.	BA4070	Smart Materials, Techniques and Equipments for Infrastructure	PEC	3	3	0	0	3
21.	BA4071	Strategic Airport Infrastructure Management	PEC	3	3	0	0	3
22.	BA4072	Real Estate Marketing and Management	PEC	3	3	0	0	3
23.	BA4073	Infrastructure and Real Estate Entrepreneurship	PEC	3	3	0	0	3
24.	BA4074	Valuation of Real Estate and Infrastructure Assets	PEC	3	3	0	0	3
Sectoral Specialization : Tourism Management								
25.	BA4075	Tourism Principles and Practices	PEC	3	3	0	0	3
26.	BA4076	Travel Management	PEC	3	3	0	0	3
27.	BA4077	International Tourism	PEC	3	3	0	0	3

28.	BA4078	Tourism Geography	PEC	3	3	0	0	3
29.	BA4079	Culture and Heritage	PEC	3	3	0	0	3
30.	BA4080	Tourism Products in India	PEC	3	3	0	0	3
31.	BA4081	Accommodation and House Keeping Management	PEC	3	3	0	0	3
32.	BA4082	Travel Media and Public Relations	PEC	3	3	0	0	3
33.	BA4083	Destination Planning and Management	PEC	3	3	0	0	3
34.	BA4084	Tour Operations	PEC	3	3	0	0	3
35.	BA4085	Leisure and Recreation Management	PEC	3	3	0	0	3
36.	BA4086	Medical Tourism	PEC	3	3	0	0	3



COURSE OBJECTIVE:

- To learn the applications of statistics in business decision making.

UNIT I INTRODUCTION**9**

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

UNIT II SAMPLING DISTRIBUTION AND ESTIMATION**9**

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

UNIT III TESTING OF HYPOTHESIS - PARAMETRIC TESTS**9**

Hypothesis testing: one sample and two sample tests for means and proportions of large samples (z-test), one sample and two sample tests for means of small samples (t-test), F-test for two sample standard deviations. ANOVA one and two way

UNIT IV NON-PARAMETRIC TESTS**9**

Chi-square test for single sample standard deviation. Chi-square tests for independence of attributes and goodness of fit. Sign test for paired data. Rank sum test. Kolmogorov-Smirnov – test for goodness of fit, comparing two populations. Mann – Whitney U test and Kruskal Wallis test. One sample run test.

UNIT V CORRELATION AND REGRESSION**9**

Correlation – Coefficient of Determination – Rank Correlation – Regression – Estimation of Regression line – Method of Least Squares – Standard Error of estimate.

TOTAL:45 PERIODS**COURSE OUTCOMES:**

- To facilitate objective solutions in business decision making.
- To understand and solve business problems.
- To apply statistical techniques to data sets, and correctly interpret the results.
- To develop skill-set that is in demand in both the research and business environments.
- To enable the students to apply the statistical techniques in a work setting.

REFERENCES:

1. Richard I. Levin, David S. Rubin, Masood H.Siddiqui, Sanjay Rastogi, Statistics for Management, Pearson Education, 8th Edition, 2017.
2. Prem. S. Mann, Introductory Statistics, Wiley Publications, 9th Edition, 2015.
3. T N Srivastava and Shailaja Rego, Statistics for Management, Tata McGraw Hill, 3rd Edition 2017.
4. Ken Black, Applied Business Statistics, 7th Edition, Wiley India Edition, 2012.
5. David R. Anderson, Dennis J. Sweeney, Thomas A.Williams, Jeffrey D.Camm, James J.Cochran, Statistics for business and economics, 13th edition, Thomson (South – Western) Asia, Singapore, 2016.
6. N. D. Vohra, Business Statistics, Tata McGraw Hill, 2017.

COURSE OBJECTIVES:

- To familiarize the students to the basic concepts of management in order to aid in understanding how an organization functions, and in understanding the complexity and wide variety of issues managers face in today's business firms.
- To acquaint the students with the fundamentals of managing business and to understand individual and group behaviour at work place so as to improve the effectiveness of an organization. The course will use and focus on Indian experiences, approaches and cases.

UNIT I NATURE AND THEORIES OF MANAGEMENT**9**

Evolution of management Thought-Classical, Behavioral and Management Science Approaches Management- meaning, levels, management as an art or science, Managerial functions and Roles, Evolution of Management Theory- Classical era- Contribution of F.W.Taylor, Henri Fayol, Neo-Classical-Mayo & Hawthorne Experiments. • Modern era – system & contingency approach Managerial Skills.

UNIT II PLANNING AND ORGANISING**9**

Planning - Steps in Planning Process - Scope and Limitations - Forecasting and types of Planning - Characteristics of a sound Plan - Management by Objectives (MBO) - Policies and Strategies - Scope and Formulation - Decision Making - Types, Techniques and Processes.

Organisation Structure and Design - Authority and Responsibility Relationships - Delegation of Authority and Decentralisation - Interdepartmental Coordination - - Impact of Technology on Organisational design - Mechanistic vs Adoptive Structures - Formal and Informal Organisation. Control: meaning, function, Process and types of Control.

UNIT III INDIVIDUAL BEHAVIOUR**9**

Meaning of Organizational behavior, contributing disciplines, importance of organizational behavior, Perception and Learning - Personality and Individual Differences - Motivation theories and Job Performance - Values, Attitudes and Beliefs - Communication Types-Process - Barriers - Making Communication Effective.

UNIT IV GROUP BEHAVIOUR**9**

Groups and Teams: Definition, Difference between groups and teams, Stages of Group Development, Group Cohesiveness, Types of teams, Group Dynamics - Leadership - Styles - Approaches - Power and Politics - Organisational Structure - Organisational Climate and Culture, Conflict: concept, sources, Types, Stages of conflict, Management of conflict Organisational Change and Development.

UNIT V EMERGING ASPECTS OF ORGANIZATIONAL BEHAVIOUR**9**

Comparative Management Styles and approaches - Japanese Management Practices Organizational Creativity and Innovation - Organizational behavior across cultures - Conditions affecting cross cultural organizational operations, Managing International Workforce, Productivity and cultural contingencies, Cross cultural communication, Management of Diversity.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

On completion of course, Students will develop

CO1 Understanding of various management concepts and skills required in the business world

CO2 In-depth knowledge of various functions of management in a real time management context

CO3 Understanding of the complexities associated with management of individual behavior in the organizations

CO4 Develop the skillset to have manage group behaviour in Organizations

CO5 Insights about the current trends in managing organizational behaviour

REFERENCES:

1. Andrew J. Dubrin, Essentials of Management, Thomson Southwestern, 10th edition, 2016.
2. Samuel C. Certo and S.Trevis Certo, Modern Management: Concepts and Skills, Pearson education, 15th edition, 2018.
3. Harold Koontz and Heinz Weihrich, Essentials of Management: An International, Innovation, And Leadership Perspective, 10th edition, Tata McGraw-Hill Education, 2015.
4. Charles W.L Hill and Steven L McShane, „Principles of Management, McGraw Hill Education, Special Indian Edition, 2017.
5. Stephen P. Robbins, Timothy A.Judge, Organisational Behavior, PHI Learning / Pearson Education, 16th edition, 2014.
6. Fred Luthans, Organisational Behavior, McGraw Hill, 12th Edition, 2013.
7. Don Hellriegel, Susan E. Jackson and John W,Jr Slocum, Management: A competency-Based Approach, Thompson South Western,11th edition, 2008.
8. Heinz Weihrich, Mark V Cannice and Harold Koontz, Management- A global entrepreneurial perspective, Tata McGraw Hill, 12th edition, 2008.
9. Stephen P. Robbins, David De Cenzo and Mary Coulter, Fundamentals Of Management, Prentice Hall of India,9 th edition 2016.
10. McShane, Mary V. Glinow, Organizational Behavior, 8th Edition, Tata Mc Graw Hill, 2017.
11. Nelson, Quick, Khandelwal. ORGB – An innovative approach to learning and teaching. Cengage learning. 2nd edition. 2012
12. Robert Konopaske, John M Ivancevich, Michael T Matteson, Oranizational Behavior and Management, 11th edition, Tata McGraw Hill, 2017.
13. Udai Pareek, Understanding Organisational Behavior, 3rd Edition, Oxford Higher Education, 2011.
14. Jerald Greenberg, Behavior in Organizations, PHI Learning. 10th edition. 2011



COURSE OBJECTIVE:

- To introduce the concepts of scarcity and efficiency; to explain principles of micro economics relevant to managing an organization; to describe principles of macroeconomics to have the understanding of economic environment of business.

UNIT I INTRODUCTION**9**

The themes of economics – scarcity and efficiency – three fundamental economic problems – society's capability – Production possibility frontiers (PPF) – Productive efficiency Vs economic efficiency – economic growth & stability – Micro economies and Macro economies – the role of markets and government – Positive Vs negative externalities.

UNIT II CONSUMER AND PRODUCER BEHAVIOUR**9**

Market – Demand and Supply – Determinants – Market equilibrium – elasticity of demand and supply – consumer behaviour – consumer equilibrium – Approaches to consumer behaviour – Production – Short-run and long-run Production Function – Returns to scale – economies Vs diseconomies of scale – Analysis of cost – Short-run and long-run cost function – Relation between Production and cost function.

UNIT III PRODUCT AND FACTOR MARKET**9**

Product market – perfect and imperfect market – different market structures – Firm's equilibrium and supply – Market efficiency – Economic costs of imperfect competition – factor market – Land, Labour and capital – Demand and supply – determination of factor price – Interaction of product and factor market – General equilibrium and efficiency of competitive markets.

UNIT IV PERFORMANCE OF AN ECONOMY – MACRO ECONOMICS**9**

Macro-economic aggregates – circular flow of macroeconomic activity – National income determination – Aggregate demand and supply – Macroeconomic equilibrium – Components of aggregate demand and national income – multiplier effect – Demand side management – Fiscal policy in theory.

UNIT V AGGREGATE SUPPLY AND THE ROLE OF MONEY**9**

Short-run and Long-run supply curve – Unemployment and its impact – Okun's law – Inflation and the impact – reasons for inflation – Demand Vs Supply factors – Inflation Vs Unemployment tradeoff – Phillips curve – short-run and long-run – Supply side Policy and management – Money market – Demand and supply of money – money-market equilibrium and national income – the role of monetary policy.

TOTAL: 45PERIODS**COURSE OUTCOMES:**

- To introduce the concepts of scarcity and efficiency;
- To explain principles of microeconomics relevant to managing an organization
- To describe principles of macroeconomics
- To have the understanding of economic environment of business.
- To study about the policies that regulate economic variables

REFERENCES:

1. Paul A. Samuelson, William D. Nordhaus, Sudip Chaudhuri and Anindya Sen, Economics, 19th edition, Tata McGraw Hill, New Delhi, 2011
2. William Boyes and Michael Melvin, Textbook of economics, Biztantra, 7 th edition 2008.
3. N. Gregory Mankiw, Principles of Economics, 8 th edition, Thomson learning, New Delhi, 2017.
4. Richard Lipsey and Alec Chrystal, Economics, 13th edition, Oxford, University Press, New Delhi, 2015.
5. Karl E. Case and Ray C. Fair, Principles of Economics, 12th edition, Pearson, Education Asia, New Delhi, 2017.
6. Panneerselvam. R, Engineering Economics, 2 nd Edition, PHI Learning, 2014.

COURSE OBJECTIVE:

- Acquire a reasonable knowledge in accounts analysis and evaluate financial statements

UNIT I FINANCIAL ACCOUNTING**9**

Introduction to Financial, Cost and Management Accounting – Generally accepted accounting principles– Double Entry System – Preparation of Journal, Ledger and Trial Balance Preparation of Final Accounts: Trading, Profit and Loss Account and Balance Sheet - Reading the financial statements

UNIT II ANALYSIS OF FINANCIAL STATEMENTS**9**

Financial ratio analysis, Interpretation of ratio for financial decisions- Dupont Ratios – Comparative statements - common size statements. Cash flow (as per Accounting Standard 3) and Funds flow statement analysis – Trend Analysis.

UNIT III COST ACCOUNTING**9**

Cost Accounts – Classification of costs – Job cost sheet – Job order costing – Process costing – (excluding Interdepartmental Transfers and equivalent production) – Joint and By Product Costing – Activity Based Costing, Target Costing.

UNIT IV MARGINAL COSTING**9**

Marginal Costing and profit planning – Cost, Volume, Profit Analysis – Break Even Analysis – Decision making problems -Make or Buy decisions -Determination of sales mix - Exploring new markets - Add or drop products -Expand or contract.

UNIT V BUDGETING AND VARIANCE ANALYSIS**9**

Budgetary Control – Sales, Production, Cash flow, fixed and flexible budget – Standard costing and Variance Analysis – (excluding overhead costing) -Accounting standards and accounting disclosure practices in India.

TOTAL : 45 PERIODS**COURSE OUTCOMES:**

1. A thorough grounding of financial accounting concepts
2. Preparation of financial statement analysis
3. Understand the management and cost accounting techniques
4. Apply the management and cost accounting techniques for decision making
5. Assess the accountancy standards of practices in India

REFERENCES:

1. R. Narayanaswamy, Financial Accounting, PHI, sixth edition, 2017.
2. M.Y. Khan & P.K. Jain, Management Accounting, Tata McGraw Hill, 8th edition, 2018.
3. T.S. Reddy & A. Murthy, Financial Accounting, Margham Publications, 2014
4. Jan Williams, Susan Haka, Mark S bettner, Joseph V Carcello, Financial and Managerial Accounting - The basis for business Decisions, 18th edition, Tata McGraw Hill Publishers, 2017
5. Charles T. Horngren, Gary L.Sundem, David Burgstahler, Jeff Schatzberg, Introduction to Management Accounting, PHI Learning, 2014 , 16th edition.
6. Earl K. Stice& James D.Stice, Financial Accounting, Reporting and Analysis, 8th edition, Cengage Learning, 2015.
7. N.M. Singhvi, Ruzbeh J.Bodhanwala, Management Accounting – Text and cases,3 rd edition PHI Learning, 2018
8. Ashish K. Battacharya, Introduction to Financial Statement Analysis, Elsiever, 2012.

COURSE OBJECTIVE:

- The objective of this course is to familiarize the students with various laws that will help them to refine their understanding of how law affects the different aspects of business.

UNIT I COMMERCIAL LAW**9****THE INDIAN CONTRACT ACT 1872**

Definition of contract, essentials elements and types of a contract, Formation of a contract, performance of contracts, breach of contract and its remedies, Quasi contracts - Contract Of Agency: Nature of agency, Creation and types of agents, Authority and liability of Agent and principal: Rights and duties of principal and agents, termination of agency.

THE SALE OF GOODS ACT 1930 Nature of Sales contract, Documents of title, risk of loss, Guarantees and Warranties, performance of sales contracts, conditional sales and rights of an unpaid seller -

NEGOTIABLE INSTRUMENTS ACT 1881: Nature and requisites of negotiable instruments. Types of negotiable instruments, liability of parties, holder in due course, special rules for Cheque and drafts, discharge of negotiable instruments.

UNIT II COMPANY LAW AND COMPETITION ACT**9**

COMPANY ACT 1956&2013 Major principles – Nature and types of companies, Formation, Memorandum and Articles of Association, Prospectus, Power, duties and liabilities of Directors, winding up of companies, Corporate Governance.

Competition Act 2002 - Introduction, Definitions, Enquiry into Certain Agreements and Dominant Position of Enterprise and Combinations.

UNIT III INDUSTRIAL LAW**9**

An Overview of Factories Act - Payment of Wages Act - Payment of Bonus Act - Industrial Disputes Act.

UNIT IV CORPORATE TAX & GST**9**

Corporate Tax Planning, Corporate Taxes and Overview of Latest Developments in Indirect tax Laws relating to GST: An introduction including constitutional aspects, Levy and collection of CGST & IGST, Basic concept of time and value of supply, Input tax credit, Computation of GST Liability, Registration, Tax Invoice, Credit & Debit Notes, Electronic Way bill, Returns, Payment of taxes including Reverse Charge

UNIT V CONSUMER PROTECTION ACT AND INTRODUCTION OF CYBER LAWS**9**

Consumer Protection Act – Consumer rights, Procedures for Consumer grievances redressal, Types of consumer Redressal Machineries and Forums-- Cyber crimes, IT Act 2000 and 2002, Cyber Laws, Introduction of IPR Intellectual Property Laws- Introduction, Legal Aspects of Patents, Filing of Patent Applications, Rights from Patents, Infringement of Patents, Copyright and its Ownership, Infringement of Copyright, Civil Remedies for Infringement.– Copy rights, Trade marks, Patent Act. Introduction, Right to Information Act, 2005.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Understand the fundamental legal principles in developing various contracts and commercial laws in the business world
2. Identify the common forms of business associations and elements of Corporate Governance
3. Develop insights regarding the laws related to industrial environment
4. Ability to understand the fundamentals of corporate tax and GST
5. Understand the role of consumer rights and cyber laws in the modern business environment

REFERENCES :

1. N. D. Kapoor, Elements of Mercantile Law, Sultan Chand and Company, India, 2017.
2. P. K. Goel, Business Law for Managers, Biztantatara Publishers, India, 2017.
3. Akhileshwar Pathak, Legal Aspects of Business, Tata McGraw Hill,, 6th Edition 2018.
4. Ravinder Kumar, Legal Aspects of Business, New Delhi: Cengage Learning, 4 th edition, 2016.
5. Sinha P.K, Dr. Vinod Singhania, Text Book of Indirect Tax, Taxman Publication, New Delhi
6. Taxmann, GST Manual with GST Law Guide & Digest of Landmark Rulings, 11th Edition, 2019
7. P. P. S. Gogna, Mercantile Law, S. Chand & Co. Ltd., India, Fourth Edition, 2015.
8. Dr. Vinod K. Singhania, Direct Taxes Planning and Management, 11 th, 2007.
9. Richard Stim, Intellectual Property- Copy Rights, Trade Marks, and Patents, Cengage Learning, 15 th edition 2017.
10. Daniel Albuquerque, Legal Aspect of Business, Oxford, 2 nd edition, 2017
11. Ravinder Kumar– Legal Aspect of Business.– Cengage Learning, 4 th Edition-2016.
12. V.S. Datey, GST Ready Reckoner, 9 th edition, 2019

BA4106

INFORMATION MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVES:

- To understand the importance of information in business
- To know about the recent information systems and technologies.

UNIT I INTRODUCTION

9

Data, Information, Information System, evolution, types based on functions and hierarchy, Enterprise and functional information systems.

UNIT II SYSTEM ANALYSIS AND DESIGN

10

System development methodologies, Systems Analysis and Design, Data flow Diagram (DFD), Decision table, Entity Relationship (ER), Object Oriented Analysis and Design(OOAD), UML diagram.

UNIT III DATABASE MANAGEMENT SYSTEMS

8

DBMS – types and evolution, RDBMS, OODBMS, RODBMS, Data warehousing, Data Mart, Data mining.

UNIT IV INTEGRATED SYSTEMS, SECURITY AND CONTROL

9

Knowledge based decision support systems, Integrating social media and mobile technologies in Information system, Security, IS Vulnerability, Disaster Management, Computer Crimes, Securing the Web.

UNIT V NEW IT INITIATIVES

9

Introduction to Deep learning, Big data, Pervasive Computing, Cloud computing, Advancements in AI, IoT, Block chain, Crypto currency, Quantum computing

TOTAL : 45 PERIODS

COURSE OUTCOMES:

1. Learn the basics of data and information system.
2. Understand the system development methodologies.
3. Understand database management system and its types.
4. Learn the various technologies in information system and its security.
5. Gains knowledge on effective applications of information systems in business.

REFERENCES:

1. Robert Schultheis and Mary Sumner, Management Information Systems – The Manager's View, Tata McGraw Hill, 2008.
2. Kenneth C. Laudon and Jane P Laudon, Management Information Systems – Managing the Digital Firm, 15th edition, 2018.
3. Panneerselvam. R, Database Management Systems, 3rd Edition, PHI Learning, 2018.

BA4111**INDIAN ETHOS (SEMINAR)****L T P C**
0 0 4 2**COURSE OBJECTIVES:**

- To enable the learners in understanding of the basic concepts of Indian Ethos and familiarise about ethical behaviour and value systems at work.

NOTE:

- The following is the list of topics suggested for preparation and presentation by students twice during the semester.
- This will be evaluated by the faculty member(s) handling the course and the final marks are consolidated at the end of the semester. No end semester examination is required for this course.
 - 1) Indian Ethos and Personality Development
 - 2) Work ethos and ethics for Professional Managers
 - 3) Indian Values, Value Systems and Wisdom for modern managers
 - 4) Ethos in leadership development
 - 5) Indian system of learning – Gurukul system of learning, Law of humility, Law of growth, Law of responsibility

TOTAL: 60 PERIODS**COURSE OUTCOMES:**

1. The learners are able to apply the basic concepts of Indian ethos and value systems at work.
2. The learners can handle issues of business ethics and offer solutions in ethical perspectives
3. The learners are professionally efficient and skilful in value systems and culture
4. The learners are capable in ethically manage business towards well being of the society.
5. The learners can be socially effective in undertaking business responsibilities.

BA4112**BUSINESS COMMUNICATION (LABORATORY)****L T P C**
0 0 4 2**COURSE OBJECTIVES:**

- To help the students to acquire some of the necessary skills to handle day-to-day managerial responsibilities, such as - making speeches, controlling one-to-one communication, enriching group activities and processes, giving effective presentations, writing letters, memos, minutes, reports and advertising, and maintaining one's poise in private and in public,

UNIT I INTRODUCTION AND TYPES OF BUSINESS COMMUNICATION**12**

Introduction to Business Communication: Principles of effective communication, Target group profile, Barriers of Communication, Reading Skills, Listening, Feedback. - Principles of Nonverbal Communication: Professional dressing and body language. Role Playing, Debates and Quiz. Types of managerial speeches - Presentations and Extempore - speech of introduction, speech of thanks, occasional speech, theme speech. - Group communication: Meetings, group discussions. - Other Aspects of Communication: Cross Cultural Dimensions of Business Communication Technology and Communication, Ethical & Legal Issues in Business Communication.

UNIT II BUSINESS COMMUNICATION WRITING MODELS AND TOOLS	12
Business letters, Routine letters, Bad news and persuasion letters, sales letters, collection letters, Maintaining a Diary, Resume/CV , job application letters, proposals. Internal communication through - notices, circulars, memos, agenda and minutes, reports. Case Studies. Exercises on Corporate Writing, Executive Summary of Documents, Creative Writing, Poster Making, Framing Advertisements, Slogans, Captions, Preparing Press Release and Press Notes	
UNIT III EFFECTIVE PRESENTATIONS	12
Principles of Effective Presentations, Principles governing the use of audiovisual media.	
UNIT IV INTERVIEW SKILLS	12
Mastering the art of giving interviews in - selection or placement interviews, discipline interviews, appraisal interviews, exit interviews, web /video conferencing, tele-meeting.	
UNIT V REPORT WRITING	12
Objectives of report, types of report, Report Planning, Types of Reports, Developing an outline, Nature of Headings, Ordering of Points, Logical Sequencing, Graphs, Charts, Executive Summary, List of Illustration, Report Writing.	

Note: The emphasis of the entire subject should be on practical aspects.

Practical: Module 1-This module introduces both written and spoken communication skills to students to build their confidence in delivering clear and logical messages to their audience. They will develop written communication skills through crafting business messages such as business letters, emails, and meeting minutes. In addition, students will work through presentations and simulated meetings to refine their spoken communication skills, discussion techniques and people skills.

Practical - Module 2-This module builds on the foundation of Business Communication 1 and creates opportunities for students to strengthen their oral and written communication. Students will be required to enhance their presentation skills through impromptu speeches. Students will also learn how to prepare a formal business report. Job hunting and employment skills will be introduced to prepare students for a positive start to their careers. Students will be taught to write application letters and resumes. Additionally, students will learn job interview techniques through role-plays and simulations

Practical - Module 3-This practical module aims to help students be persuasive in the business world. Students will learn listening and data gathering skills to better understand their target audience's needs and requirements and persuasive skills to convince the audience to accept a new policy/suggestion/product through role-playing a boardroom presentation. Students will also be taught business networking skills including conversation techniques, dining etiquette and personal branding through role-plays and simulations.

TOTAL : 60 PERIODS

COURSE OUTCOMES:

1. Develop good managerial communication skills
2. Ability to excel in different forms of written communication required in a business context
3. Develop good presentation skills
4. In-depth understanding of interview skills
5. Ability to prepare Business reports

REFERENCES :

1. Rajendra Pal, J.S. Korlahalli ,Essentials of Business Communication by, Sultan Chand & Sons, 13th Edition
2. Meenakshi Raman, Prakash Singh ,Business Communication by, Oxford, 2 nd edition, 2012
3. Raymond V. Lesikar, Flatley, Basic Business Communication Skills for Empowering the Internet Generation by, M.E., TMGH , New Delhi , 10 th edition, 2004

4. Ludlow R , Panton ,The Essence of Effective Communications , Prentice Hall of India Pvt. Ltd. 2, 1995
5. C. S. Rayadu , Communication by, HPH, 2015
6. R. C. Sharma , Krishna Mohan ,Business Correspondence & Report Writing , Tata McGraw Hill, 5th Edition, 2017
7. Malcolm Goodale , Developing Communication Skills, 2nd Edition Professional Presentations, Cambridge University Press
8. Supplementary Reading Material Business Communication - Harvard Business Essentials Series, HBS Press
9. Adair, J , Effective Communication. , Pan Macmillan Excellence in Business Communication by Thill, J. V. &Bovee, G. L, McGraw Hill, New York. Business Communications: From Process to Product by Bowman, J.P. &Branchaw, P.P., Dryden Press, Chicago.

WEBSITES :

www.businesscommunicationskills.com
www.kcittraining.com
www.mindtools.com
www.businesscommunication.org

BA4201

QUANTITATIVE TECHNIQUES FOR DECISION MAKING

L T P C
3 0 0 3

COURSE OBJECTIVE:

- To apply quantitative techniques in modeling and solving business related problems.

UNIT I INTRODUCTION TO LINEAR PROGRAMMING (LP)

9

Relevance of quantitative techniques in management decision making. Linear Programming- formulation, solution by graphical and simplex methods (Primal - Penalty, Two Phase), Special cases. Sensitivity Analysis.

UNIT II LINEAR PROGRAMMING EXTENSIONS

9

Transportation Models (Minimising and Maximising Problems) – Balanced and unbalanced Problems – Initial Basic feasible solution by N-W Corner Rule, Least cost and Vogel's approximation methods. Check for optimality. Solution by MODI / Stepping Stone method. Case of Degeneracy. Transshipment Models.

Assignment Models (Minimising and Maximising Problems) – Balanced and Unbalanced Problems. Solution by Hungarian and Branch and Bound Algorithms. Travelling Salesman problem. Crew Assignment Models.

UNIT III DECISION AND GAME THEORIES

9

Decision making under risk – Decision trees – Decision making under uncertainty.

Game Theory-Two-person Zero sum games-Saddle point, Dominance Rule, Convex Linear Combination (Averages), methods of matrices, graphical and LP solutions.

UNIT IV INVENTORY AND REPLACEMENT MODELS

9

Inventory Models – EOQ and EBQ Models (With and without shortages), Quantity Discount Models.

Replacement Models-Individual replacement Models (With and without time value of money) – Group Replacement Models.

UNIT V QUEUING THEORY AND SIMULATION

9

Queuing Theory - single and multi-channel models – infinite number of customers and infinite calling source.

Monte Carlo simulation – use of random numbers, application of simulation techniques

TOTAL: 45 PERIODS

COURSE OUTCOMES:

To understand the applications of

1. Linear programming in product mix decisions
2. Transportation and assignment in logistics and job allocation scenarios
3. Game theory and heuristics of decision making in real time decisions
4. Inventory management and replacement models in manufacturing context
5. Queuing and simulation in real time scenario optimisation

REFERENCES:

1. N. D Vohra, Quantitative Techniques in Management, Tata Mcgraw Hill, 2010.
2. G. Srinivasan, Operations Research – Principles and Applications, 2nd edition, PHI, 2011.
3. Paneerselvam R., Operations Research, Prentice Hall of India, Fourth Print, 2008.
4. Hamdy A Taha, Introduction to Operations Research, Prentice Hall India, Tenth Edition, Third Indian Reprint 2019.
5. Bernard W. Taylor III, Introduction to Management Science, 9th Edition, Pearson Ed.
6. Frederick & Mark Hillier, Introduction to Management Science – A Modeling and case studies approach with spreadsheets, Tata Mcgraw Hill, 2010.
7. Nagraj B, Barry R and Ralph M. S Jr., Managerial Decision Modelling with Spreadsheets, Second Edition, 2007, Pearson Education.

BA4202

FINANCIAL MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVES:

Facilitate student

- Understand the operational nuances of a Finance Manager.
- Comprehend the technique of making decisions related to finance functions.

UNIT I FOUNDATIONS OF FINANCE

9

Introduction to finance- Financial Management – Nature, scope and functions of Finance, organization of financial functions, objectives of Financial management, Major financial decisions – Time value of money – features and valuation of shares and bonds – Concept of risk and return – single asset and of a portfolio.

UNIT II INVESTMENT DECISIONS

9

Capital Budgeting: Principles and techniques - Nature of capital budgeting- Identifying relevant cash flows - Evaluation Techniques: Payback, Accounting rate of return, Net Present Value, Internal Rate of Return, Profitability Index - Comparison of DCF techniques - Concept and measurement of cost of capital - Specific cost and overall cost of capital.

UNIT III FINANCING AND DIVIDEND DECISION

9

Leverages - Operating and Financial leverage – measurement of leverages – degree of Operating & Financial leverage – Combined leverage, EBIT – EPS Analysis- Indifference point. Capital structure – Theories – Net Income Approach, Net Operating Income Approach, MM Approach – Determinants of Capital structure.

Dividend decision- Issues in dividend decisions, Importance, Relevance & Irrelevance theories- Walter's – Model, Gordon's model and MM model. – Factors determining dividend policy – Types of dividend policies – forms of dividend.

UNIT IV WORKING CAPITAL MANAGEMENT

9

Principles of working capital: Concepts, Needs, Determinants, issues and estimation of working capital - Receivables Management - Inventory management – Cash management - Working capital finance : Commercial paper, Company deposit, Trade credit, Bank finance.

UNIT V LONG TERM SOURCES OF FINANCE

9

Indian capital market- New issues market- Secondary market - Long term finance: Shares, debentures and term loans, lease, hire purchase, venture capital financing, Private Equity.

TOTAL :45 PERIODS

COURSE OUTCOMES:

1. Identify the concepts of financial decision of an organisation
2. Recognize the time value of money
3. Learn the capital budgeting and cost of capital techniques
4. Understand how to decide the decision of capital structure and distribution of dividend
5. Assess the short-term and long-term sources of finance

REFERENCES :

1. I M. Pandey Financial Management, Vikas Publishing House Pvt. Ltd., 11th edition, 2018
2. M.Y. Khan and P.K.Jain Financial management, Text, Problems and cases Tata McGraw Hill, 8th edition, 2017.
3. AswathDamodaran, Corporate Finance Theory and practice, John Wiley & Sons, 2011.
4. James C. Vanhorne –Fundamentals of Financial Management– PHI Learning,13th Edition, 2014.
5. Brigham, Ehrhardt, Financial Management Theory and Practice, 14th edition, Cengage Learning 2015.
6. Prasanna Chandra, Financial Management, 9th edition, Tata McGraw Hill, 2017.
7. Srivatsava, Mishra, Financial Management, Oxford University Press, 2012.

BA4203**HUMAN RESOURCE MANAGEMENT**

L	T	P	C
3	0	0	3

COURSE OBJECTIVE:

- To provide knowledge about management issues related to staffing, training, performance, compensation, human factors consideration and compliance with human resource requirements.

UNIT I PERSPECTIVES IN HUMAN RESOURCE MANAGEMENT**9**

Evolution of human resource management – The importance of the human capital – Role of human resource manager –Challenges for human resource managers - trends in Human resource policies – Computer applications in human resource management – Human resource accounting and audit.

UNIT II HUMAN RESOURCE PLANNING AND RECRUITMENT**9**

Importance of Human Resource Planning – Forecasting human resource requirement –matching supply and demand - Internal and External sources- Organizational Attraction-. Recruitment, Selection, Induction and Socialization- Theories, Methods and Process.

UNIT III TRAINING AND DEVELOPMENT**9**

Types of training methods –purpose- benefits- resistance. Executive development programme – Common practices - Benefits – Self development – Knowledge management.

UNIT IV EMPLOYEE ENGAGEMENT**9**

Compensation plan – Reward – Motivation – Application of theories of motivation – Career management – Mentoring - Development of mentor – Protégé relationships- Job Satisfaction, Employee Engagement, Organizational Citizenship Behavior: Theories, Models.

UNIT V PERFORMANCE EVALUATION AND CONTROL**9**

Method of performance evaluation – Feedback – Industry practices. Promotion, Demotion, Transfer and Separation – Implication of job change. The control process – Importance – Methods – Requirement of effective control systems grievances – Causes – Implications – Redressal methods.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Students would have gained knowledge on the various aspects of HRM
2. Students will gain knowledge needed for success as a human resources professional.
3. Students will develop the skills needed for a successful HR manager
4. Students would be prepared to implement the concepts learned in the workplace.
5. Students would be aware of the emerging concepts in the field of HRM

REFERENCES :

1. Gary Dessler and Biju Varkkey, Human Resource Management, 14th Edition, Pearson Education Limited, 2015.
2. David A. Decenzo, Stephen.P.Robbins, and Susan L. Verhulst, Human Resource Management, Wiley, International Student Edition, 11th Edition, 2014.
3. Luis R.Gomez-Mejia, David B.Balkin, Robert L Cardy. Managing Human Resource. PHI Learning. 2012
4. Bernadin , Human Resource Management ,Tata Mcgraw Hill ,8th edition 2012.
5. Wayne Cascio, Managing Human Resource, McGraw Hill, 2015.
6. Ivancevich, Human Resource Management, McGraw Hill 2012.
7. Uday Kumar Halder, Juthika Sarkar. Human Resource management. Oxford. 2012

BA4204

OPERATIONS MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVE:

- To provide a broad introduction to the field of operations management and explain the concepts, strategies, tools and techniques for managing the transformation process that can lead to competitive advantage.

UNIT I INTRODUCTION TO OPERATIONS MANAGEMENT

9

Operations Management – Nature, Importance, historical development, transformation processes, differences between services and goods, a system perspective, functions, challenges, current priorities, recent trends. Operations Strategy – Strategic fit , framework. Productivity; World-class manufacturing practices

UNIT II OPERATIONS AND THE VALUE CHAIN

9

Capacity Planning – Long range, Types, Developing capacity alternatives, tools for capacity planning. Facility Location – Theories, Steps in Selection, Location Models. Sourcing and procurement - Strategic sourcing, make or buy decision, procurement process, managing vendors.

UNIT III DESIGNING OPERATIONS

9

Product Design - Criteria, Approaches. Product development process - stage-gate approach - tools for efficient development. Process - design, strategy, types, analysis. Facility Layout – Principles, Types, Planning tools and techniques.

UNIT IV PLANNING AND CONTROL OF OPERATIONS

9

Demand Forecasting – Need, Types, Objectives and Steps - Overview of Qualitative and Quantitative methods. Operations planning - Resource planning - Inventory Planning and Control. Operations Scheduling - Theory of constraints - bottlenecks, capacity constrained resources, synchronous manufacturing

UNIT V QUALITY MANAGEMENT

9

Definitions of quality, The Quality revolution, quality gurus; TQM philosophies; Quality management tools, certification and awards. Lean Management - philosophy, elements of JIT manufacturing, continuous improvement. Six sigma.

TOTAL: 45 PERIODS

COURSE OUTCOMES:

1. Understanding of the evolution of operations management practices and world class manufacturing processes
2. Knowledge about capacity planning, strategic sourcing and procurement in organizations
3. Enhances the understanding of product development and design process
4. Ability to forecast demand and overcome bottlenecks
5. Provides insight to Quality management tools and practices.

REFERENCES :

1. Richard B. Chase, Ravi Shankar, F. Robert Jacobs, Operations and Supply Chain Management, McGraw Hill Education (India) Pvt. Ltd, 14th Edition, 2014.
2. Mahadevan B, Operations management: Theory and practice. Pearson Education India; 2015.
3. William J Stevenson, Operations Management, Tata McGraw Hill, 9th Edition, 2009.
4. Russel and Taylor, Operations Management, Wiley, 5th Edition, 2006.
5. Norman Gaither and Gregory Frazier, Operations Management, South Western Cengage Learning, 9th edition, 2015.
6. Cecil C. Bozarth, Robert B. Handfield, Introduction to Operations and Supply Chain Management, Pearson, 4th Edition, 2016.
7. Panneerselvam. R, Production and Operations Management, 3rd Edition,. PHI Learning, 2012.

BA4205

BUSINESS RESEARCH METHODS

L T P C
3 0 0 3

COURSE OBJECTIVE:

- To make the students of tourism understand the principles of scientific methodology in business enquiry, develop analytical skills of business research and to prepare scientific business reports.

UNIT I INTRODUCTION

9

Business Research – Definition and Significance – the research process – Types of Research – Exploratory and causal Research – Theoretical and empirical Research – Cross –Sectional and time – series Research – Research questions / Problems – Research objectives – Research hypotheses – characteristics – Research in an evolutionary perspective – the role of theory in research.

UNIT II RESEARCH DESIGN AND MEASUREMENT

9

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

UNIT III DATA COLLECTION

9

Types of data – Primary Vs Secondary data – Methods of primary data collection – Survey Vs Observation – Experiments – Construction of questionnaire and instrument – Types of Validity – Sampling plan – Sample size – determinants optimal sample size – sampling techniques – Sampling methods.

UNIT IV DATA PREPARATION AND ANALYSIS

9

Data Preparation – editing – Coding –Data entry – Validity of data – Qualitative Vs Quantitative data analyses – Applications of Bivariate and Multivariate statistical techniques, Factor analysis, Discriminant analysis, Cluster analysis, Multiple regression and Correlation, Multidimensional scaling – Conjoint Analysis – Application of statistical software for data analysis.

UNIT V REPORT DESIGN, WRITING AND ETHICS IN BUSINESS RESEARCH

9

Research report –Types – Contents of report – need for executive summary – chapterization – contents of chapter – report writing – the role of audience – readability – comprehension – tone – final proof – report format – title of the report – ethics in research – Ethics in research – Subjectivity and Objectivity in research.

TOTAL : 45 PERIODS

COURSE OUTCOMES :

1. Students will understand and appreciate scientific inquiry
2. Students would know to write research proposals
3. The students would be able to undertake a systematic outlook towards business situations for the purpose of objective decision making, and the method of conducting scientific inquiry to solve organizational problems
4. Students would be able to analyze data and find solutions to the problems.
5. Students could prepare research reports

REFERENCES :

1. Donald R. Cooper, Pamela S. Schindler and J K Sharma, Business Research methods, 11th Edition, Tata Mc Graw Hill, New Delhi, 2012.
2. Alan Bryman and Emma Bell, Business Research methods, 3rd Edition, Oxford University Press, New Delhi, 2011.
3. Uma Sekaran and Roger Bougie, Research methods for Business, 5th Edition, Wiley India, New Delhi, 2012.
4. William G Zikmund, Barry J Babin, Jon C.Carr, AtanuAdhikari,Mitch Griffin, Business Research methods, A South Asian Perspective, 8th Edition, Cengage Learning, New Delhi, 2012.
5. Panneerselvam. R, Research Methodology, 2nd Edition, PHI Learning, 2014.

BA4206

BUSINESS ANALYTICS

L T P C
3 0 0 3

COURSE OBJECTIVES:

Learn to

1. Use business analytics for decision making
2. To apply the appropriate analytics and generate solutions
3. Model and analyse the business situation using analytics.

UNIT I INTRODUCTION TO BUSINESS ANALYTICS (BA) 9

Business Analytics - Terminologies, Process, Importance, Relationship with Organisational Decision Making, BA for Competitive Advantage.

UNIT II MANAGING RESOURCES FOR BUSINESS ANALYTICS 9

Managing BA Personnel, Data and Technology. Organisational Structures aligning BA. Managing Information policy, data quality and change in BA.

UNIT III DESCRIPTIVE ANALYTICS 9

Introduction to Descriptive analytics - Visualising and Exploring Data - Descriptive Statistics - Sampling and Estimation - Probability Distribution for Descriptive Analytics - Analysis of Descriptive analytics

UNIT IV PREDICTIVE ANALYTICS 9

Introduction to Predictive analytics - Logic and Data Driven Models - Predictive Analysis Modeling and procedure - Data Mining for Predictive analytics. Analysis of Predictive analytics

UNIT V PRESCRIPTIVE ANALYTICS 9

Introduction to Prescriptive analytics - Prescriptive Modeling - Non Linear Optimisation - Demonstrating Business Performance Improvement.

TOTAL: 45 PERIODS

COURSE OUTCOMES:

1. Ability to understand the role of Business Analytics in decision making
2. Ability to identify the appropriate tool for the analytics scenario
3. Ability to apply the descriptive analytics tools and generate solutions
4. Understanding of Predictive Analytics and applications
5. Knowledge of Prescriptive Analytics and demonstrating business process improvement

REFERENCES

1. Marc J. Schniederjans, Dara G. Schniederjans and Christopher M. Starkey, " Business Analytics Principles, Concepts, and Applications - What, Why, and How" , Pearson Ed, 2014
2. Christian Albright S and Wayne L. Winston, "Business Analytics - Data Analysis and Decision Making" , Fifth edition, Cengage Learning, 2015.
3. James R. Evans, "Business Analytics - Methods, Models and Decisions", Pearson Ed, 2012.

COURSE OBJECTIVES:

- To understand the changing business environment and the fundamental premise underlying market driven strategies.
- To identify the indicators of management thoughts and practices.

UNIT I INTRODUCTION**9**

Defining Marketing – Core concepts in Marketing – Evolution of Marketing – Marketing Planning Process – Scanning Business environment: Internal and External – Value chain – Core Competencies – PESTEL – SWOT Analysis – Marketing interface with other functional areas – Production, Finance, Human Relations Management, Information System – Marketing in global environment – International Marketing – Rural Marketing – Prospects and Challenges.

UNIT II MARKETING STRATEGY**9**

Marketing strategy formulations – Key Drivers of Marketing Strategies - Strategies for Industrial Marketing – Consumer Marketing – Services marketing – Competition Analysis – Analysis of consumer and industrial markets – Influence of Economic and Behavioral Factors – Strategic Marketing Mix components.

UNIT III MARKETING MIX DECISIONS**9**

Product planning and development – Product life cycle – New product Development and Management – Defining Market Segmentation – Targeting and Positioning – Brand Positioning and Differentiation – Channel Management – Managing Integrated Marketing Channels – Managing Retailing, Wholesaling and Logistics – Advertising and Sales Promotions – Pricing Objectives, Policies and Methods

UNIT IV BUYER BEHAVIOUR**9**

Understanding Industrial and Consumer Buyer Behavior – Influencing factors – Buyer Behaviour Models – Online buyer behaviour – Building and measuring customer satisfaction – Customer relationships management – Customer acquisition, Retaining, Defection – Creating Long Term Loyalty Relationships.

UNIT V MARKETING RESEARCH & TRENDS IN MARKETING**9**

Marketing Information System – Marketing Research Process – Concepts and applications: Product – Advertising – Promotion – Consumer Behaviour – Retail research – Customer driven organizations - Cause related marketing – Ethics in marketing – Online marketing trends - social media and digital marketing

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Applied knowledge of contemporary marketing theories to the demands of business and management practice.
2. Enhanced knowledge of marketing strategies for consumer and industrial marketing
3. Deep understanding of choice of marketing mix elements and managing integrated marketing channels
4. Ability to analyze the nature of consumer buying behaviour
5. Understanding of the marketing research and new trends in the arena of marketing

REFERENCES:

1. Philip T. Kotler and Kevin Lane Keller, Marketing Management, Prentice Hall India, 15th Edition, 2017.
2. KS Chandrasekar, "Marketing management-Text and Cases", Tata McGraw Hill Education, 2012
3. Lamb, Hair, Sharma, Mc Daniel– Marketing – An Innovative approach to learning and teaching- A south Asian perspective, Cengage Learning, 2012.
4. Paul Baines, Chris Fill, Kelly Page, Marketing, Asian edition, Oxford University Press, 5th edition, 2019.
5. Ramasamy, V.S, Namakumari, S, Marketing Management: Global Perspective Indian Context, Macmillan Education, New Delhi, 6th edition, 2018.
6. A. NAG, Marketing successfully- A Professional Perspective, Macmillan 2008.
7. Micheal R.Czinkota, Masaaki Kotabe, Marketing Management, Vikas Thomson Learning, 2nd edition 2006.
8. Philip Kotler, Gay Armstrong, Prafulla Agnihotri, Principles of marketing, 7th edition, 2018.

BA4211**BUSINESS ETHICS (SEMINAR)****L T P C**
0 0 4 2**COURSE OBJECTIVE:**

- To enable the learners to have exposure on business ethics and ethical business perspectives.

NOTE :

- The following is the list of topics suggested for preparation and presentation by students twice during the semester.
- This will be evaluated by the faculty member(s) handling the course and the final marks are consolidated at the end of the semester. No end semester examination is required for this course.
 - 1) Individual Culture and Ethics
 - 2) Ethical codes of conduct and value Systems
 - 3) Loyalty and Ethical Behaviour, Ethical decision making
 - 4) Ethical business issues and solutions
 - 5) Corporate Social Responsibilities of Business

TOTAL: 60 PERIODS**COURSE OUTCOMES:**

1. The learners can handle issues of business ethics and offer solutions ethical perspectives
2. The learners are able to apply the basic concepts of Indian ethos and value systems at work.
3. The learners can handle issues of business ethics and offer solutions in ethical perspectives
4. The learners are professionally efficient and skilful in value systems and culture
5. The learners are capable in ethically manage business towards well being of the society.
6. The learners can be socially effective in undertaking business responsibilities.

BA4212**DATA ANALYSIS AND BUSINESS MODELING
(LABORATORY)****L T P C**
0 0 4 2**OBJECTIVE :**

- to have hands-on experience on data analysis for business modeling.

S.No.	Exp. No.	Details of experiments	Duration
		Name	
1	1	Descriptive Statistics	4
2	2	Parametric Tests	4
3	3	Non-parametric Tests	4
4	4	Correlation & Regression	4
5	5	Forecasting	4
6	-	Extended experiment – 1	4
7	6	Portfolio Selection	4
8	7	Risk Analysis & Sensitivity Analysis	4

9	8	Revenue Management	4
10	-	Extended experiment – 2	4
11	9	Transportation & Assignment	4
12	10	Networking Models	4
13	11	Queuing Theory	4
14	12	Inventory Models	4
15	-	Extended experiments – 3	4

➤ Spreadsheet Software and Data Analysis Tools

TOTAL: 60 PERIODS

COURSE OUTCOMES:

1. Deep knowledge about the nature of data and conducting hypothesis testing using various data analysis techniques
2. Facilitates to identify the relationship between variables using data analytical tools
3. Provides understanding about forecasting in real time business world using analytical tools
4. Ability to conduct Risk and sensitivity analysis and portfolio selection based on business data
5. Enhances knowledge about networking, inventory models and queuing theory using data analytical tools

REFERENCES:

1. David R. Anderson, et al, "An Introduction to Management Sciences: Quantitative approaches to Decision Making", (13th edition) South-Western College Pub, 2011.
2. William J. Stevenson, CeyhanOzgur, "Introduction to Management Science with Spreadsheet", Tata McGraw Hill, 2009.
3. Hansa Lysander Manohar, "Data Analysis and Business Modelling using Microsoft Excel" PHI, 2017.
4. David M. Levine et al, "Statistics for Managers using MS Excel" (6th Edition) Pearson, 2010.
5. Minnick, C. WebKit for Dummies. John Wiley & Sons, (2012).

BA4301

STRATEGIC MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVE:

- To learn the major initiatives taken by a company's top management on behalf of corporate, involving resources and performance in external environments. It entails specifying the organization's mission, vision and objectives, and to equip with skills required to manage business and non-business organizations at senior levels. The course adopts a functional approach to management developing policies and plan to understand the analysis and implementation of strategic management in strategic business units.

UNIT I STRATEGY AND PROCESS

9

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

UNIT II COMPETITIVE ADVANTAGE

9

External Environment - Porter's Five Forces Model-Strategic Groups Competitive Changes during Industry Evolution-Globalisation and Industry Structure - National Context and Competitive advantage Resources- Capabilities and competencies–core competencies-Low cost and differentiation Generic Building Blocks of Competitive Advantage- Distinctive Competencies- Resources and Capabilities durability of competitive Advantage- Avoiding failures and sustaining competitive advantage-Case study.

UNIT III STRATEGIES

9

The generic strategic alternatives – Stability, Expansion, Retrenchment and Combination strategies - Business level strategy- Strategy in the Global Environment-Corporate Strategy- Vertical Integration-Diversification and Strategic Alliances- Building and Restructuring the corporation- Strategic analysis and choice – Managing Growth - Environmental Threat and Opportunity Profile (ETOP) - Organizational Capability Profile - Strategic Advantage Profile - Corporate Portfolio Analysis - SWOT Analysis - GAP Analysis - Mc Kinsey's 7s Framework - GE 9 Cell Model – Distinctive competitiveness - Selection of matrix - Balance Score Card-case study.

UNIT IV STRATEGY IMPLEMENTATION & EVALUATION

9

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

UNIT V OTHER STRATEGIC ISSUES

9

Managing Technology and Innovation - Strategic issues for Non Profit organisations. New Business Models and strategies for Internet Economy-case study Challenges in Strategic Management: Introduction, Strategic Management as an Organisational Force, Dealing with Strategic Management in Various Situations, Strategic Management Implications and Challenges

Recent Trends in Strategic Management: Introduction, Strategic Thinking, Organisational Culture and its Significance, Organisational Development and Change, Change Management, Strategic management in a new globalised economy

TOTAL: 45 PERIODS

COURSE OUTCOMES:

1. Ability to understand the Strategic management process and social responsibility of business organizations
2. In-depth understanding about the need for developing competitive advantage for organizations
3. Provides insights into various corporate and business level strategies
4. Facilitates to identify the various control systems required for organizational strategy implementation process
5. Enhances the cognitive knowledge about various strategic issues and development of new business models

REFERENCES:

1. Hill. Strategic Management: An Integrated approach, 2009 Edition Wiley (2012).
2. John A.Parnell. Strategic Management, Theory and practice Biztantra (2012).
3. Azhar Kazmi, Strategic Management and Business Policy, 3rd Edition, Tata McGraw Hill, 2008
4. AdriaanH Aberberg and Alison Rieple, Strategic Management Theory & Application, Oxford University Press, 2008.
5. Lawrence G. Hrebiniak, Making strategy work, Pearson, 2 nd edition, 2013.
6. Gupta, Gollakota and Srinivasan, Business Policy and Strategic Management – Concepts and Application, Prentice Hall of India, 2005.
7. Dr.Dharma Bir Singh, Strategic Management & Business Policy, KoGent Learning Solutions Inc., Wiley, 2012.
8. John Pearce, Richard Robinson and Amitha Mittal, Strategic Management, McGraw Hill, 12th Edition, 2012
9. Lafley AG and Roger L Martin, Playing to Win : Strategy really works, Harvard Business Review Press

COURSE OBJECTIVE:

- To understand the multinational dimensions in management of a MNC company and the business operations in more than one country.

UNIT I AN OVERVIEW OF INTERNATIONAL BUSINESS**9**

Definition and drivers of International Business- Changing Environment of International Business- Country attractiveness- Trends in Globalization- Effect and Benefit of Globalization-International Institution: UNCTAD Basic Principles and Major Achievements, Role of IMF, Features of IBRD, Role and Advantage of WTO.

UNIT II THEORIES OF INTERNATIONAL TRADE AND INVESTMENT**9**

Theories of International Trade: Mercantilism, Absolute Advantage Theory, Comparative Cost Theory, Hecksher-Ohlin Theory-Theories of Foreign Direct Investment : Product Life Cycle, Eclectic, Market Power, Internationalisation-Instruments of Trade Policy : Voluntary Export Restraints, Administrative Policy, Anti-dumping Policy, Balance of Payment.

UNIT III GLOBAL ENTRY**9**

Strategic compulsions— Strategic options – Global portfolio management- Global entry strategy, different forms of international business, advantages - Organizational issues of international business – Organizational structures – Controlling of international business, approaches to control – Performance of global business, performance evaluation system.

UNIT IV PRODUCTION, MARKETING, FINANCIALS OF GLOBAL BUSINESS**9**

Global production: Location, scale of operations- cost of production- Standardization Vs Differentiation- Make or Buy decisions- global supply chain issues- Quality considerations. Globalization of markets: Marketing strategy- Challenges in product development- pricing- production and channel management. Foreign Exchange Determination Systems: Basic Concepts-types of Exchange Rate Regimes- Factors Affecting Exchange Rates.

UNIT V HUMAN RESOURCE MANAGEMENT IN INTERNATIONAL BUSINESS**9**

Selection of expatriate managers- Managing across cultures -Training and development- Compensation- Disadvantages of international business – Conflict in international business- Sources and types of conflict – Conflict resolutions – Negotiation –Ethical issues in international business – Ethical decision-making.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. In Depth knowledge of driving factors of international Business
2. Understanding of theories of trade and investment practiced in the global world
3. Deep Insights in to various market entry strategies followed by Global Organizations
4. Ability to identify the various global production and supply chain issues and have an understanding of foreign exchange determination system
5. Enhance the cognitive knowledge of managing business across the cultures

REFERENCES:

1. Charles W.I. Hill and Arun Kumar Jain, International Business, 6th edition, Tata McGraw Hill, New Delhi, 2010.
2. Michael R. Czinkota, Ilkka A. Ronkainen and Michael H. Moffet, International Business, 7th Edition, Cengage Learning, New Delhi, 2010.
3. K. Aswathappa, International Business, 5th Edition, Tata Mc Graw Hill, New Delhi, 2012.
4. John D. Daniels and Lee H. Radebaugh, International Business, Pearson Education Asia, New Delhi, 12th edition.
5. Vyuptakesh Sharan, International Business, 3rd Edition, Pearson Education in South Asia, New Delhi, 2011.
6. Rakesh Mohan Joshi, International Business, Oxford University Press, New Delhi, 2009.

COURSE OBJECTIVES:

- To understand the nuances involved in Creativity & Innovation.
- To get hands on experience in applying creativity in problem solving.

UNIT I INTRODUCTION**12**

Need for Creative and innovative thinking for quality – Essential theory about directed creativity, Components of Creativity, Methodologies and approaches, individual and group creativity, Organizational role in creativity, types of innovation, barriers to innovation, innovation process, establishing criterion for assessment of creativity & innovation.

UNIT II MECHANISM OF THINKING AND VISUALIZATION**12**

Definitions and theory of mechanisms of mind heuristics and models: attitudes, Approaches and Actions that support creative thinking - Advanced study of visual elements and principles- line, plane, shape, form, pattern, texture gradation, colour symmetry. Spatial relationships and compositions in 2- and 3-dimensional space - procedure for genuine graphical computer animation – Animation aerodynamics – virtual environments in scientific Visualization – Unifying principle of data management for scientific visualization – Visualization benchmarking

UNIT III CREATIVITY**12**

Nature of Creativity: Person, Process, Product and Environment, Methods and tools for Directed Creativity – Basic Principles – Tools that prepare the mind for creative thought – stimulation – Development and Actions: - Processes in creativity ICEDIP – Inspiration, Clarification, Distillation, Perspiration, Evaluation and Incubation – Creativity and Motivation The Bridge between man creativity and the rewards of innovativeness – Applying Directed Creativity.

UNIT IV CREATIVITY IN PROBLEM SOLVING**12**

Generating and acquiring new ideas, product design, service design – case studies and hands-on exercises, stimulation tools and approaches, six thinking hats, lateral thinking – Individual activity, group activity, contextual influences. Assessing Your Personal Creativity and Ability to Innovate, Enhancing Your Creative and Innovative Abilities

UNIT V INNOVATION**12**

Innovation- radical vs evolutionary, – Introduction to TRIZ methodology of Inventive Problem Solving – the essential factors – Innovator's solution – creating and sustaining successful growth – Disruptive Innovation model – Segmentive Models – New market disruption – Managing the Strategy Development Process – The Role of Senior Executive in Leading New Growth – Passing the Baton, Entrepreneurial Tools for Creativity and Innovation

TOTAL: 60 PERIODS**COURSE OUTCOMES:**

1. Provides insights about approaches to creativity and innovation
2. Understanding of heuristic models and its applications
3. Enhances the knowledge of nature of creativity
4. Ability to apply creativity in problem solving
5. Knowledge about radical and disruptive models of innovation

Note: Students will undergo the entire programme similar to a Seminar. It is an activity-based course. Students will undergo the programme with both theoretical and practical content. Each student will be required to come out with innovative products or services. This will be evaluated by the faculty member(s) handling the course and the consolidated marks can be taken as the final mark. No end semester examination is required for this course

REFERENCES:

1. Rousing Creativity: Think New Now Floyd Hurt, ISBN 1560525479, Crisp Publications Inc.1999
2. Geoffrey Petty," How to be better at Creativity", The Industrial Society 2012
3. Clayton M. Christensen Michael E. Raynor," The Innovator's Solution", Harvard Business School Press Boston, USA, 2007
4. Semyon D. Savransky," Engineering of Creativity – TRIZ", CRC Press New York USA," 1st edition 2000
5. CSG Krishnamacharyalu, Lalitha R Innovation management , Himalaya Publishing House 2013

BA4032

ENTREPRENEURSHIP DEVELOPMENT

L T P C
3 0 0 3

COURSE OBJECTIVES:

- To equip and develop the learners entrepreneurial skills and qualities essential to undertake business.
- To impart the learners entrepreneurial competencies needed for managing business efficiently and effectively.

UNIT I ENTREPRENEURIAL COMPETENCE

9

Entrepreneurship concept – Entrepreneurship as a Career – Entrepreneurial Personality - Characteristics of Successful Entrepreneurs – Knowledge and Skills of an Entrepreneur.

UNIT II ENTREPRENEURIAL ENVIRONMENT

9

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

UNIT III BUSINESS PLAN PREPARATION

9

Sources of Product for Business - Prefeasibility Study - Criteria for Selection of Product - Ownership - Capital Budgeting- Project Profile Preparation - Matching Entrepreneur with the Project - Feasibility Report Preparation and Evaluation Criteria.

UNIT IV LAUNCHING OF SMALL BUSINESS

9

Finance and Human Resource Mobilisation - Operations Planning - Market and Channel Selection - Growth Strategies - Product Launching – Incubation, Venture capital, Start-ups.

UNIT V MANAGEMENT OF SMALL BUSINESS

9

Monitoring and Evaluation of Business - Business Sickness - Prevention and Rehabilitation of Business Units - Effective Management of small Business - Case Studies.

TOTAL : 45 PERIODS

COURSE OUTCOMES:

After the completion of the course, the students will be able to:

1. The learners will gain entrepreneurial competence to run the business efficiently.
2. The learners are able to undertake businesses in the entrepreneurial environment
3. The learners are capable of preparing business plans and undertake feasible projects.
4. The learners are efficient in launching and develop their business ventures successfully
5. The learners shall monitor the business effectively towards growth and development..

REFERENCES:

1. S.S.Khanka, Entrepreneurial Development, S.Chand and Company Limited, New Delhi, 2016.
2. R.D.Hisrich, Entrepreneurship, Tata McGraw Hill, New Delhi, 2018.
3. Rajeev Roy ,Entrepreneurship, Oxford University Press, 2nd Edition, 2011.
4. Donald F Kuratko,T.V Rao. Entrepreneurship: A South Asian perspective. Cengage Learning, 2012.
5. Dr. Vasant Desai, "Small Scale Industries and Entrepreneurship", HPH,2006.
6. Arya Kumar. Entrepreneurship, Pearson,2012.
7. Prasanna Chandra, Projects – Planning, Analysis, Selection, Implementation and Reviews, Tata McGraw-Hill, 8 th edition ,2017.

COURSE OBJECTIVE:

- This course is designed to provide an introduction to the principles of event management. The course aims to impart knowledge on the various events and how these events can be organized successfully.

UNIT I EVENT CONTEXT**9**

History & Evolution – Types of events – MICE – Types of Meeting, Trade Shows, Conventions, Exhibitions- Structure of event industry – Event Management as a profession – Perspectives on event : Government, Corporate & Community – Code of Ethics.

UNIT II EVENT PLANNING & LEGAL ISSUES**9**

Conceptualizing the event – Host, sponsor, Media, Guest, Participants , Spectators – Crew – Design of concept – Theme and content development – Visualization – Event objectives – Initial planning – Budgeting – Event design and budget checklist – Preparation of functional sheets – Timing – Contracts and Agreements – Insurance, Regulation, Licence and Permits – Negotiation.

UNIT III EVENT MARKETING**9**

Role of Strategic Marketing Planning - Pricing – Marketing Communication Methods & budget – Elements of marketing communication – Managing Marketing Communication – Role of Internet – Sponsorship – Event sponsorship – Strategy – Managing Sponsorships – Measuring & Evaluating sponsorship.

UNIT IV EVENT OPERATION**9**

Site Selection – Types of location – Venue Requirements – Room, Stage, Audi-Visual, Lighting, Performers, Decors, Caterer, Photography & Videography – Protocols – Guest list – Guest demographics – Children at event – Invitation – Media – Freelance Event Operation – Road show - Food & Beverage – Entertainment – Event Logistics – Supply of facilities – Onsite logistics – Control of event logistics – Evaluation & Logistics.

UNIT V SAFETY & EVENT EVALUATION**9**

Risk assessment – Safety officer, Medical Manager – Venue, Structural safety – Food safety – Occupational safety – Fire Prevention – Sanitary facilities – Vehicle traffic – Waste Management. Event Impact – Event Evaluation Process – Service Quality - Customer Satisfaction.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Learning about structure and code of ethics of events
2. Exploring and getting to know about event planning and regulations
3. Understand about event marketing, planning and strategies
4. Enhance professional skills in event management
5. Analyse the safety measure of event management

REFERENCES:

1. Lynn Van Der Wagen, Event Management for Tourism, Cultural Business & Sporting Events, 4 th Edition, Pearson Publications, 2014.
2. Lynn Van Der Wagen, & Brenda R. Carlos ,Sucessful Event Management.
3. Judy Allen, Event Planning 2nd Edition, Wiley & Sons, Canada, 2014.
4. G.A.J. Bowdin, Events Management ,Elseiver Butterworth
5. John Beech, Sebastian Kaiser & Robert Kaspar, The Business of Events Management, Pearson Publication, 2014.
6. Judy, Event Planning Ethics and Etiquette: A Principled Approach to the Business of Special Event Management, 2014.
7. Shannon Kilkenny, The complete guide to successful event planning.
8. Julia Rutherford Silvers, Professional Event Coordination, The Wiley Event Management Series.
9. Allison ,The Event Marketing Handbook: Beyond Logistics & Planning.

COURSE OBJECTIVES:

Enables student to

- Understand the nuances of stock market operations.
- Understand the techniques involved in deciding upon purchase or sale of securities.

UNIT I INVESTMENT SETTING**9**

Financial and economic meaning of Investment – Characteristics and objectives of Investment – Investment process -Types of Investment – Investment alternatives – Choice and Evaluation – Risk and return concepts - Valuation of bonds and stock.

UNIT II FUNDAMENTAL ANALYSIS**9**

Economic Analysis – Economic forecasting and stock Investment Decisions – Forecasting techniques. Industry Analysis : Industry classification, Industry life cycle – Company Analysis Measuring Earnings – Forecasting Earnings – Applied Valuation Techniques – Graham and Dodds investor ratios.

UNIT III TECHNICAL ANALYSIS**9**

Fundamental Analysis Vs Technical Analysis -- Dow theory – Charting methods - Chart Patterns Trend – Trend reversals – Market Indicators -Moving Average – Exponential moving Average Oscillators -RSI -ROC - MACD. Efficient Market theory - Forms of market efficiency -weak, semi-strong, strong form - Empirical tests of market efficiency -its application.

UNIT IV PORTFOLIO CONSTRUCTION AND SELECTION**9**

Portfolio analysis - Reduction of portfolio risk through diversification – Portfolio risk - Portfolio Selection - Feasible set of portfolios - Efficient set - Markowitz model - Single index model - Construction of optimum portfolio - Multi-index model.

UNIT V**9**

Capital Asset Pricing model - Lending and borrowing - CML - SML - Pricing with CAPM - Arbitrage pricing theory– Portfolio Evaluation - Sharpe's index Treynor's index, Jensen's index – Mutual Funds – Portfolio Revision.

TOTAL :45 PERIODS**COURSE OUTCOMES :**

1. Understand the concept of investment and identify the investment alternatives to investors
2. Learn the nuances of fundamental analyses and technical analyses
3. Analyse and evaluate the value of securities
4. Explain how to construct an efficient portfolio
5. Explore the various methods through which portfolio evaluation could be done

REFERENCES :

1. Donald E.Fischer& Ronald J.Jordan, Security Analysis & Portfolio Management, PHI Learning., New Delhi, 8th edition, 2011.
2. Prasannachandra, Investment analysis and Portfolio Management, Tata McGraw Hill, 2011.
3. Reilly & Brown, Investment Analysis and Portfolio Management, Cengage Learning, 9th edition, 2011.
S. Kevin , Securities Analysis and Portfolio Management , PHI Learning , 2012.
4. Punithavathy Pandian, Analysis & Portfolio Management, Vikas publishing house PVT LTD, second edition, 2013.
5. Bodi, Kane, Markus, Mohanty, Investments, 8th edition, Tata McGraw Hill, 2011.
6. V.A.Avadhan, Securities Analysis and Portfolio Management, Himalaya Publishing House, 2013.
7. V.K.Bhalla, Investment Management, S.Chand & Company Ltd., 2012

COURSE OBJECTIVE:

- To understand the types and functions of the various financial markets in India, its instruments and Regulations.

UNIT I FINANCIAL MARKETS IN INDIA**9**

Indian financial system and markets – structure of financial markets in India –Types-Participants in financial Market – Regulatory Environment, - RBI, CCIL, Common securities market, Money market, - Capital market - Governments philosophy and financial market – financial instruments

UNIT II INDIAN CAPITAL MARKET- PRIMARY MARKET**9**

Primary Market - Primary market system - Types of scripts - Issue of capital: process, regulation pricing of issue, – Methods of floating new issues, Book building- Primary markets intermediaries: commercial banks, development banks, Merchant banker, issue managers, rating agencies etc – Role of primary market – Regulation of primary market.

UNIT III SECONDARY MARKET**9**

Stock exchanges in India - History and development -listing - Depositories - Stock exchange mechanism: Trading, Settlement, risk management, Basics of pricing mechanism - Player and stock exchange - Regulations of stock exchanges –Role of SEBI – BSE, OTCEI, NSE, ISE, - Role of FIIs, MFs and investment bankers –Stock market indices – calculation.

UNIT IV DEBT MARKET AND FOREX MARKET**9**

Bond markets in India: Government bond market and its interface with capital market - Components of bond market - G-Sec, T-Bills, Corporate Bonds, Yield conventions, Role of primary dealers, Auction Markets - Pricing of Bonds

Introduction to Forex markets, basics in exchange rates theory - Forex risk exposures and basics of corporate forex risk management.

UNIT V MUTUAL FUNDS, DERIVATIVES MARKETS AND VENTURE CAPITAL AND PRIVATE EQUITY**9**

Mutual funds institutions in India. Types of mutual funds, Basics in portfolio management, Metrics of performance for fund manager

Introduction to Derivatives and the size of derivatives markets -Brief introduction to forwards, Options, Futures And Swaps. Role of VCs and PEs in financial markets - Venture capital and Private equity

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Understanding the basic concepts of the finance markets in India
2. Identify the underlying structure and functions of Indian financial markets
3. Familiarise the methods of issuing shares and the role of intermediaries in the primary market
4. Learn about the trading mechanism in stock market
5. Describe the instruments, participants and trading in debt market

REFERENCES:

1. Christopher Viney and Peter Phillips, Financial Institutions, Instruments and Markets (2015), 8th Edition published by McGraw Hill.
2. Pathak, Bharati V., Indian Financial System: Markets, Institutions and Services, Pearson education (Singapore), New Delhi, Fourth edition, 2014.
3. Saunders, Anthonu and Cornett, Marcia Millon, Financial markets and Institutions: An Introduction to the risk management approach, McGrawHill, Irwin, New York,3rd Edition,2017.
4. Bhole, L.M, Financial institutions and Markets: Structure, Growth and Innovations, McGrawHill, New Delhi, Sixth edition, 2017.
5. Fabozzi, Frank J. and Modigliani, Franco, Capital Markets: Institutions and Markets, Prentice Hall of India, New Delhi, Fourth edition, 2009.

COURSE OBJECTIVES :

- Grasp how banks raise their sources and how they deploy it and manage the associated risks
- Understand e-banking and the threats that go with it.
- Understand about other asset based and fund based financial services in India

UNIT I INTRODUCTION TO INDIAN BANKING SYSTEM AND PERFORMANCE EVALUATION
9

Overview of Indian Banking system – Structure – Functions – Key Regulations in Indian Banking sector – RBI Act, 1934/ 2006 – Banking Regulation Act, 1949– Negotiable Instruments Act 1881/ 2002 – Provisions Relating to CRR – Provision for NPA's - Overview of Financial Statements of banks – Balance Sheet – Income Statement - CAMEL

UNIT II MANAGING BANK FUNDS/ PRODUCTS & RISK MANAGEMENT
9

Capital Adequacy – Deposit and Non-deposit sources – Designing deposit schemes and pricing of deposit sources – loan management – Investment Management – Asset and Liability Management – Financial Distress –Signal to borrowers – Prediction Models – Risk Management – Interest rate – Forex – Credit market –operational and solvency risks – NPA's – Current issues on NPA's – M&A's of banks into securities market

UNIT III DEVELOPMENT IN BANKING TECHNOLOGY
9

Payment system in India – paper based – e payment –electronic banking –plastic money – e-money –forecasting of cash demand at ATM's –The Information Technology Act, 2000 in India – RBI's Financial Sector Technology vision document – security threats in e-banking & RBI's Initiative.

UNIT IV ASSET BASED FINANCIAL SERVICES
9

Introduction – Need for Financial Services – Financial Services Market in India –NBFC – RBI framework and act for NBFC – Leasing and Hire Purchase – Financial evaluation – underwriting – mutual funds

UNIT V INSURANCE AND OTHER FEE BASED FINANCIAL SERVICES
9

Insurance Act, 1938 –IRDA – Regulations – Products and services –Venture Capital Financing –Bill discounting –factoring – Merchant Banking – Role of SEBI

TOTAL :45 PERIODS**COURSE OUTCOMES:**

1. Understand the overall structure and functions of Indian Financial System
2. Gain knowledge about regulations governing the Indian Banking system
3. Price various types of loans proposed by banks to various prospective borrowers with different risk profiles and evaluate the performance of banks
4. Familiarise the students with the concept of e-banking
5. In-depth understanding of fee-based and fund-based financial services in India

REFERENCES:

1. Padmalatha Suresh and Justin Paul, "Management of Banking and Financial Services, Pearson, Delhi, 2017.
2. Meera Sharma, "Management of Financial Institutions – with emphasis on Bank and Risk Management", PHI Learning Pvt. Ltd., New Delhi 2010
3. Peter S. Rose and Sylvia C. and Hudgins, "Bank Management and Financial Services", Tata McGraw Hill, New Delhi, 2017

COURSE OBJECTIVES:

To enable students

- Understand the nuances involved in derivatives
- Understand the basic operational mechanisms in derivatives

UNIT I INTRODUCTION**10**

Derivatives – Definition – Types – Forward Contracts – Futures Contracts – Options – Swaps – Differences between Cash and Future Markets – Types of Traders – OTC and Exchange Traded Securities – Types of Settlement – Uses and Advantages of Derivatives – Risks in Derivatives.

UNIT II FUTURES CONTRACT**10**

Specifications of Futures Contract - Margin Requirements – Marking to Market – Hedging using Futures – Types of Futures Contracts – Securities, Stock Index Futures, Currencies and Commodities – Delivery Options – Relationship between Future Prices, Forward Prices and Spot Prices.

UNIT III OPTIONS**10**

Definition – Exchange Traded Options, OTC Options – Specifications of Options – Call and Put Options – American and European Options – Intrinsic Value and Time Value of Options – Option payoff, options on Securities, Stock Indices, Currencies and Futures – Options pricing models – Differences between future and Option contracts.

UNIT IV SWAPS**7**

Definition of SWAP – Interest Rate SWAP – Currency SWAP – Role of Financial Intermediary – Warehousing – Valuation of Interest rate SWAPs and Currency SWAPs Bonds and FRNs – Credit Risk.

UNIT V DERIVATIVES IN INDIA**8**

Evolution of Derivatives Market in India – Regulations - framework – Exchange Trading in Derivatives – Commodity Futures – Contract Terminology and Specifications for Stock Options and Index Options in NSE – Contract Terminology and specifications for stock futures and Index futures in NSE – Contract Terminology and Specifications for Interest Rate Derivatives.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Possess good skills in hedging risks using derivatives
2. Understand about future contract and options
3. Learning in depth about options and swaps
4. Knowing about the evolution of derivative markets
5. Develop in depth knowledge about stock options and index futures in NSE

REFERENCES:

1. John.C.Hull, Options, Futures and other Derivative Securities", PHI Learning, 9th Edition, 2012
2. Keith Redhead, „Financial Derivatives – An Introduction to Futures, Forwards, Options and SWAPs", – PHI Learning, 2011.
3. Stulz, Risk Management and Derivatives, Cengage Learning, 2nd Edition, 2011.
4. Varma, Derivatives and Risk Management, 2ndnd Edition, 2011.
5. David Dubofsky – „Option and Financial Futures – Valuation and Uses, McGraw Hill International Edition.
6. S.L.Gupta, Financial Derivatives- Theory, Concepts and Practice, Prentice Hall Of India, 2011. Website of NSE, BSE.

COURSE OBJECTIVE:

- Making students to build financial models by including various fields of study viz Financial Management and Derivatives.

UNIT I INTRODUCTION TO FINANCIAL MODELLING & BUILT IN FUNCTIONS USING SPREAD SHEETS 9

Introduction to Financial Modelling- Need for Financial Modelling- Steps for effective financial modelling-Introduction to Time value of money & Lookup array functions :FV,PV,PMT,RATE,NPER, Vlookup, Hlookup ,if, countifetc - Time value of Money Models: EMI with Single & Two Interest rates –Loan amortisation modelling-Debenture redemption modelling

UNIT II BOND & EQUITY SHARE VALUATION MODELLING 9

Bond valuation – Yield to Maturity(YTM): Rate method Vs IRR method-Flexi Bond and Strip Bond YTM Modelling-Bond redemption modelling -Equity share valuation : Multiple growth rate valuation modelling with and without growth rates

UNIT III CORPORATE FINANCIAL MODELLING 9

Alt Man Z score Bankruptcy Modelling-Indifference point modelling – Financial Break even modelling -Corporate valuation modelling (Two stage growth)- Business Modelling for capital budgeting evaluation: Payback period ,NPV ,IRR and MIRR

UNIT IV PORTFOLIO MODELLING 9

Risk ,Beta and Annualised Return –Security Market Line Modelling –Portfolio risk calculation (Equal Proportions)-Portfolio risk optimisation (varying proportions)-Portfolio construction modelling

UNIT V DERIVATIVE MODELLING 9

Option pay off modelling: Long and Short Call & Put options -Option pricing modeling (B-S Model)-Optimal Hedge Contract modelling

TOTAL: 45 PERIODS

COURSE OUTCOMES:

1. Develop fast, efficient and accurate excel skills
2. Design and construct useful and robust financial modelling applications
3. Recognize efficient financial budgeting and forecasting techniques
4. Familiarise the students with the valuation modelling of securities
5. The course establishes the platform for students to develop various portfolio models

REFERENCES:

1. Wayne L Winston," Microsoft Excel 2016-Data Analysis and Business Modelling ",PHI publications, (Microsoft Press),New Delhi,2017.
2. Chandan Sen Gupta, "Financial analysis and Modelling –Using Excel and VBA" , Wiley Publishing House ,2014'
3. Craig W Holden,"Excel Modelling in Investments" Pearson Prentice Hall, Pearson Inc,New Jersey,5th Edition 2015
4. Ruzhbeh J Bodanwala , "Financial management using excel spread sheet",Taxman Allied services Pvt Ltd, New Delhi,3rd Edition 2015.

COURSE OBJECTIVE:

- To understand the International Financial Environment, Management and Risks involved.

UNIT I INTERNATIONAL TRANSACTIONS**9**

Overview and Evolution of International Finance –Institutions for International Finance – Internationalization process –International Monetary and Financial System – Balance of Payments – Exchange rate and money supply – International parity relations – Purchasing power parity – interest rate parity – Forward rate parity.

UNIT II MULTINATIONAL FINANCIAL MANAGEMENT**9**

Process of overseas expansion – Reasons for cross-border investing – The theory of investment – techniques of project evaluation - Approaches for investment under uncertainty - FDI – Measuring and Managing Risk – International M&A – Financial Techniques in M&A – Regulations of M&A in major countries.

UNIT III INTERNATIONAL MONETARY SYSTEM**9**

Introduction to Institutions of the Foreign Exchange Interbank Market - Foreign Exchange Spot Transactions – forward market — Hedging and Speculation - Hedging FX Transaction Exposure - The Eurocurrency market – international banking – structure and instruments

UNIT IV BORROWING AND LENDING : INTERNATIONAL SOURCES OF FINANCE**9**

Bond Markets of various countries – Fixed and floating rate notes - Syndicate loans – Syndicated Eurocredits – ADR – GDR – Managing interest rate risk – Bond prices and yields – Bond Management – tools and techniques

UNIT V INTERNATIONAL RISK ASSESSMENT AND OTHER INTERNATIONAL MARKETS**9**

Country and political risk analysis – benefits and risks of international portfolio investment – assessing country creditworthiness – futures markets and instruments – option markets and instruments – option pricing – option pricing theory in financial risk assessment

TOTAL :45 PERIODS**COURSE OUTCOMES:**

1. Learn about evolution, process and system of International Finance
2. Identify the concepts of international merger and acquisitions, financial techniques and regulations
3. Understand about international monetary system
4. Knowing about ADR, GDR and bond management
5. Explore the learning in international risk assessment

REFERENCES :

1. Apte P.G., International Financial Management, Tata McGraw Hill, 2011.
2. Jeff Madura, International Corporate Finance, Cengage Learning, 9th Edition, 2011.
3. Alan C. Shapiro, Multinational Financial Management, PHI Learning, 5th Edition, 2010.
4. Eunand Resnik, International Financial Management, Tata McGraw Hill, 5th Edition, 2011.
5. Website of Indian Government on EXIM policy

COURSE OBJECTIVE :

- To identify and understand systematic behavioral factors that influences the investment behavior.

UNIT I INTRODUCTION: WHY BEHAVIORAL FINANCE 9
 The role of security prices in the economy – EMH – Failing EMH – EMH in supply and demand framework – Equilibrium expected return models – Investment decision under uncertainty – Introduction to neoclassical economics and expected utility theory – Return predictability in stock market - Limitations to arbitrage

UNIT II DECISION AND BEHAVIORAL THEORIES 9
 Nash Equilibrium: Keynesian Beauty Context and The Prisoner's Dilemma - The Monthly Hall Paradox - The St. Petersburg Paradox - The Allais Paradox - The Ellsberg Paradox - Prospects theory – CAPM - behavioral portfolio theory – SP/A theory – brief history on rational thought – pasac – Fermat to Friedman - savage

UNIT III DECISION MAKING BIASES 9
 Information screening bias - Heuristics and behavioral biases of investors – Bayesian decision making – cognitive biases – forecasting biases – emotion and neuroscience – group behaviour – investing styles and behavioral finance

UNIT IV ARBITRAGEURS 9
 Definition of arbitrageur - Long-short trades - Risk vs. Horizon - Transaction costs and short-selling costs - Fundamental risk - Noise-trader risk - Professional arbitrage - Destabilizing informed trading

UNIT V MANAGERIAL DECISIONS 9
 Supply of securities and firm investment characteristics (market timing, catering) by rational firms - Associated institutions - Relative horizons and incentives - Biased managers

TOTAL :45 PERIODS**COURSE OUTCOMES :**

1. Understanding the need of behavioural finance
2. Knowing about various decision and behavioural theories
3. Learn about heuristic and behavioural biases of investors
4. Analyse and understand about arbitrageurs and managerial decision
5. Thorough understanding about the price discovery in markets\

REFERENCES :

1. Shleifer, Andrei (2000). Inefficient Markets: An Introduction to Behavioral Finance. Oxford, UK: Oxford University Press.
2. Daniel Kahneman, Paul Slovic, and Amos Tversky (eds.). (1982) Judgment under Uncertainty: Heuristics and biases, Oxford; New York: Oxford University Press.

COURSE OBJECTIVE:

- To understand the concepts of effective retailing

UNIT I INTRODUCTION**9**

An overview of Global Retailing – Challenges and opportunities – Retail trends in India – Socio economic and technological Influences on retail management – Government of India policy implications on retails.

UNIT II RETAIL FORMATS**9**

Organized and unorganized formats – Different organized retail formats – Characteristics of each format – Emerging trends in retail formats – MNC's role in organized retail formats.

UNIT III RETAILING DECISIONS**9**

Choice of retail locations - internal and external atmospherics – Positioning of retail shops – Building retail store Image - Retail service quality management – Retail Supply Chain Management – Retail Pricing Decisions. Merchandizing and category management – buying.

UNIT IV RETAIL SHOP MANAGEMENT**9**

Visual Merchandise Management – Space Management – Retail Inventory Management – Retail accounting and audits - Retail store brands – Retail advertising and promotions – Retail Management Information Systems - Online retail – Emerging trends .

UNIT V RETAIL SHOPPER BEHAVIOUR**9**

Understanding of Retail shopper behavior – Shopper Profile Analysis – Shopping Decision Process - Factors influencing retail shopper behavior – Complaints Management - Retail sales force Management – Challenges in Retailing in India.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. To provide insights on retail operation
2. To understand effective methods and strategies required for retail management.
3. To understand how to utilize resources and techniques used in retail management.
4. To understand analysis of store location, merchandising, products and pricing.
5. To gain knowledge about shopping behaviour

REFERENCES:

1. Michael Havy ,Baston, Aweitz and Ajay Pandit, Retail Management, Tata McGraw Hill, Sixth Edition, 2007
2. Ogden, Integrated Retail Management, Biztantra, India, 2008.
3. Patrick M. Dunne and Robert F Lusch, Retailing, Thomson Learning, 4th Edition 2008.
4. Chetan Bajaj, Rajnish Tow and Nidhi V. Srivatsava, Retail Management, Oxford University Press, 2007.
5. Swapna Pradhan, Retail Management -Text and Cases, Tata McGraw Hill, 3rd Edition, 2009.
6. Dunne, Retailing, Cengage Learning, 2nd Edition, 2008
7. Ramkrishnan and Y.R.Srinivasan, Indian Retailing Text and Cases, Oxford University Press, 2008
8. Dr.JaspreetKaur , Customer Relationship Management, Kogent solution.

COURSE OBJECTIVE:

- To study and understand the consumer' behavior in-order to effectively utilise the market' potential

UNIT I INTRODUCTION

9

Understanding Consumer behaviour - Consumption, Consumer orientation, Interpretive and Quantitative approaches - Effects of Technology, Demographics and Economy on Consumer behaviour.

UNIT II INTERNAL INFLUENCES

9

Influences on consumer behavior – motivation – perception – Attitudes and Beliefs - Learning and Experience - Personality & Self Image.

UNIT III EXTERNAL INFLUENCES

9

Socio-Cultural, Cross Culture - Family group – Reference group – Communication - Influences on Consumer behavior

UNIT IV CONSUMER BEHAVIOR MODELS

9

Traditional and Contemporary Consumer behaviour model for Individual and industrial buying behaviour and decision making.

UNIT V PURCHASE DECISION PROCESS

9

Consumer decision making process – Steps, Levels and decision rules - Evolving Indian consumers – Opinion Leadership - Diffusion and Adoption.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

The student understands

1. Consumer orientation and consumption
2. Intrinsic influences
3. Effects of external influences
4. Models of consumer and industrial buying
5. The decision making process

REFERENCES:

1. RamanujMajumdar, Consumer Behaviour - Insights from Indian Market, PHI, 2010.
2. Leon G.Schiffman and Leslie LasarKanuk, Consumer Behavior, Pearson Education, India, ninth edition, 2010.
3. Barry J.B., Eric G.H., Ashutosh M., Consumer Behaviour - A South Asian Perspective, Cengage Learning, 2016.
4. Paul Peter et al., Consumer Behavior and Marketing Strategy, Tata McGraw Hill, Indian Edition, 7th Edition 2005.

COURSE OBJECTIVE:

- This course introduces students to the essential concepts and techniques for the development and designing an effective Integrated Marketing Communication programme.

UNIT I AN INTRODUCTION TO INTEGRATED MARKETING COMMUNICATION (IMC)

9

An Introduction to Integrated Marketing Communication (IMC): Meaning and role of IMC in Marketing process, one voice communication V/s IMC. Introduction to IMC tools – Advertising, sales promotion, publicity, public relations, and event sponsorship; The role of advertising agencies and other marketing organizations providing marketing services and perspective on consumer behaviour

UNIT II UNDERSTANDING COMMUNICATION PROCESS**9**

Understanding communication process: Source, Message and channel factors, Communication response hierarchy- AIDA model, Hierarchy of effect model, Innovation adoption model, information processing model, The standard learning Hierarchy, Attribution Hierarchy, and low 20% involvement hierarchy Consumer involvement- The Elaboration Likelihood (ELM) model, The Foote, Cone and Belding (FCB) Model

UNIT III PLANNING FOR MARKETING COMMUNICATION (MARCOM)**9**

Establishing marcom Objectives and Budgeting for Promotional Programmes-Setting communication objectives, Sales as marcom objective, DAGMAR approach for setting ad objectives. Budgeting for marcom-Factors influencing budget, Theoretical approach to budgeting viz. Marginal analysis and Sales response curve, Method to determine marcom budget

UNIT IV DEVELOPING THE INTEGRATED MARKETING COMMUNICATION PROGRAMME**9**

Planning and development of creative marcom, Creative strategies in advertising, sales promotion, publicity, event sponsorships etc. Creative strategy in implementation and evaluation of marcom- Types of appeals and execution styles. Media planning and selection decisions- steps involved and information needed for media planning. Measuring the effectiveness of all Promotional tools and IMC.

UNIT V DIGITAL MEDIA & ADVERTISING**9**

Digital Media, Evolution of Technology, Convergence of Digital Media, E- Commerce and Digital Media, Advertising on Digital Media, Social Media, Mobile Advertising, E-PR Advertising Laws & Ethics: Advertising & Law, Advertising & Ethics

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. To review and give a general understanding of the basics of traditional communication forms, such as advertising, personal selling, sales promotion and indirect promotion within various delivery vehicles from broadcast to targeted social media.
2. This course introduces students to the essential concepts and techniques for the development and designing an effective Integrated Marketing Communication programme.
3. To Know how IMC fits into the marketing mix.
4. To develop an awareness about marketing communications tools, and how each can be used effectively- individually or in an integrated mix.
5. To examine the process by which integrated marketing communications programs are planned, developed, executed and measured.

REFERENCES:

1. Advertising & Promotion- An Integrated Marketing Communications Perspective, George Belch, Michael Belch & Keyoor Purani, TATA McGraw Hill 8th edition
2. Wells, Moriarty & Burnett, Advertising, Principles & Practice, Pearson Education, 7th Edition, 2007. Kenneth Clow. Donald Baack, Integrated Advertisements, Promotion and Marketing communication, Prentice Hall of India, New Delhi, 3rd Edition, 2006.
3. Terence A. Shimp and J. Craig Andrews, Advertising Promotion and other aspects of Integrated Marketing Communications, CENGAGE Learning, 9th edition, 2016
4. S. H. H. Kazmi and Satish K Batra, Advertising & Sales Promotion, Excel Books, New Delhi, 3rd Revised edition, 2008.
5. Julian Cummings, Sales Promotion: How to Create, Implement and Integrate Campaigns that Really Work, Kogan Page, London, Fifth Edition, 2010.
6. Jaishri Jethwaney, Advertising Management, Oxford University Press, 2nd Edition, 2013.
7. Dr Niraj Kumar, Integrated Marketing Communication, Himalaya Publishing House 2015

COURSE OBJECTIVE:

- To appreciate the challenges involved in managing the services and analyse the strategies to deal with these challenges.
- To give insights about the foundations of services marketing, customer expectations of services and gap existing in the service delivery processes and service Quality.

UNIT I INTRODUCTION**9**

Introduction– Definition– Service Economy – Evolution and growth of service sector – Nature and Scope of Services –Difference between services and tangible products– Unique characteristics of services– Challenges and issues in Services Marketing.

UNIT II SERVICE MARKETING OPPORTUNITIES**9**

Assessing service market potential – Classification of services – Expanded marketing mix – Service marketing – Environment and trends – Service market segmentation, targeting and positioning.

UNIT III SERVICE DESIGN AND DEVELOPMENT**9**

Service Life Cycle – New service development – Service Blue Printing – GAP model of service quality – Measuring service quality – SERVQUAL – Service Quality function development.

UNIT IV SERVICE DELIVERY AND PROMOTION**9**

Positioning of services – Designing service delivery System, Service Channel – Pricing of services, methods – Service marketing triangle – Managing demand, Managing supply, managing Demand and Supply of Service–Integrated Service marketing communication.

UNIT V SERVICE STRATEGIES**9**

Service Marketing Strategies for Health – Hospitality – Tourism – Financial – Logistics– Educational – Marketing of Online Services– Entertainment & public utility Information technique Services

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

On successful completion of the course students will be able to:

1. Demonstrate an extended understanding of the similarities and differences in service-based and physical product based marketing activities
2. Develop and justify marketing planning and control systems appropriate to service-based activities
3. Demonstrate integrative knowledge of marketing issues associated with service productivity, perceived quality, customer satisfaction and loyalty
4. Develop blueprint for the services sector and develop a better appreciation of the necessary strategies to create a service excellence.
5. Recognise the challenges faced in services delivery as outlined in the services gap model

REFERENCES:

1. Chiristopher H. Lovelock and JochenWirtz, Services Marketing: People, Technology, strategy Pearson Education, New Delhi, 8th edition, 2016.
2. John.E.G.Bateson, K.Douglas Hoffman, Services Marketing, South Western Cengage learning, 4th Edition, 2011.
3. Kenneth E Clow, et al, Services Marketing Operation Management and Strategy, Biztantra, 2nd Edition, New Delhi, 2004.
4. Valarie Zeithaml et al, Services Marketing, 5th International Edition, Tata McGraw Hill, 2007.
5. Christian Gronroos, Services Management and Marketing a CRM in Service Competition, 3rd Edition, Wiley, 2007.
6. R. Srinivasan, SERVICES MARKETING, Prentice Hall of India Private Limited, 4th Edition 2014, New Delhi.
7. Vinnie Jauhari&kirti Dutta (2017), Services Marketing, Text and cases, 2nd edition.

COURSE OBJECTIVE:

- To gain insights into the selling and distribution process.

UNIT I INTRODUCTION**9**

Sales management - nature and scope. Sales management positions. Personal Selling - Scope, theories and strategies. Sales forecasting and budgeting decisions. Online selling - scope, potential, Merits and Demerits.

UNIT II PERSONAL SELLING PROCESS, SALES TERRITORIES & QUOTAS**9**

Selling process and relationship selling. Designing Sales Territories and quotas. Sales organisation structures.

UNIT III MANAGING THE SALES FORCE**9**

Sales force - recruitment, selection, training, motivating, compensation and control.

UNIT IV MANAGING DISTRIBUTION CHANNELS**9**

Distribution Management - Introduction, need and scope. Channels - Strategies and levels, retailing and wholesaling. Designing channel systems and channel management.

UNIT V BASICS OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT**9**

Logistics - Scope, definition and components. Managing FG Inventory & warehousing. Transportation - Scope, Modes and role in Supply Chain effectiveness. Use of Information Technology in Online Selling and Goods tracking.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

The student get to learn about

1. The basics of sales management, theories and strategies
2. The process of personal and relationship selling
3. Managing sales force
4. Managing distribution channels
5. Inventory and supply chain.

REFERENCES:

1. Krishna K. Havaladar, Vasant M. Cavale, Sales and Distribution Management - Text and Cases, Third Edition, McGraw Hill Education, 2017
2. Gupta S.L., Sales and Distribution Management - Text and Cases - An Indian Perspective, Excel Books, 2008
3. Pingali Venugopal, Sales and Distribution Management - An Indian Perspective, Response Books from Sage Publications, 2008.

COURSE OBJECTIVES:

- To help the students appreciate the relationship between Corporate Strategy and Product and Brand Management
- To provide a framework to understand the new product development process, the organisational structures for new product development and product management functions within an organisation
- To explore the various issues related to Brand Management and to enhance the understanding and appreciation of this important intangible strategic asset, including brand associations, brand identity, brand architecture, leveraging brand assets, brand portfolio management etc.

UNIT I**9**

Management of New Product Development Process - Managing Product Life cycle -Brands and Branding- Introduction to Brand Management -Brand Management Process - Brand Choice Decisions and Models.

UNIT II**9**

Product Plans-Elements of Branding- Brand Identity -Brand Communication -Brand Positioning -Brand Image and Personality - Valuation of Brands- Brand Valuation -Brand Tracking and Monitoring.

UNIT III**9**

Marketing Mix Factors and Products-Managing Brand Over Time- Building Brands in Indian Market - Launching a New Brand -Revitalizing Brands - Branding Strategies- Brand Extension Strategies - Brand Portfolio Management- Managing Brands Across Geographical Borders.

UNIT IV**9**

Managing Brand Experience - Digital Branding-Employment Branding - Co-branding- Brand extension scorecard-Culture and branding-Brand flashbacks-Future brand priorities.

UNIT V**9**

Advertising -Brand Name Plan- Pricing Systems -Product Distribution Systems -Advertising and Sales Promotion - Product Sales Management -Product and Public Relations Service Product Marketing - Industrial Product Marketing Product Exports and International Marketing -Critical Success Factors in Brand Management.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

- Apply the fundamental concepts of product and brand development and management.
- Use the brand positioning framework to develop a brand, keep it relevant, expand a brand internationally, and reposition a brand.
- Use tools and metrics to analyse competitors and develop positioning strategies.
- Recognize the importance of using teams and organization to coordinate multiple interdisciplinary tasks in order to create and manage products within an organization.
- Apply an understanding of the product manager's role in product pricing, sales, and promotion.

REFERENCES:

1. Strategic Brand Management: Building, Measuring, and Managing Brand Equity, by Kevin lane Keller;Ambi M. G. Parameswaran; IssacJacob;Fourth edition; Pearson Education India; 2015; ISBN-10: 9789332542204; ASIN: 9332542201
2. Product and Brand Management Tapan K. Panda Paperback: 888 pages Publisher: Oxford University Press; First edition (January 2016);ISBN-10: 9780199460496; ISBN-13: 978-0199460496; ASIN: 0199460493
3. Product and brand management by U C Mathur;Publisher: Excel Books (December 2012)ISBN-10: 9350620146;ISBN-13: 978-9350620144

COURSE OBJECTIVES:

- The primary objective of this module is to examine and explore the role and importance of digital marketing in today's rapidly changing business environment.
- It also focusses on how digital marketing can be utilised by organisations and how its effectiveness can be measured.

UNIT I

Online Market space- Digital Marketing Strategy- Components -Opportunities for building Brand-Website - Planning and Creation- Content Marketing.

UNIT II

Search Engine optimisation - Keyword Strategy- SEO Strategy - SEO success factors -On-Page Techniques - Off-Page Techniques. Search Engine Marketing- How Search Engine works- SEM components- PPC advertising -Display Advertisement

UNIT III

E- Mail Marketing - Types of E- Mail Marketing - Email Automation - Lead Generation - Integrating Email with Social Media and Mobile- Measuring and maximising email campaign effectiveness. Mobile Marketing- Mobile Inventory/channels- Location based; Context based; Coupons and offers, Mobile Apps, Mobile Commerce, SMS Campaigns-Profiling and targeting.

UNIT IV

Social Media Marketing - Social Media Channels- Leveraging Social media for brand conversations and buzz.Successful /benchmark Social media campaigns. Engagement Marketing- Building Customer relationships - Creating Loyalty drivers - Influencer Marketing.

UNIT V

Digital Transformation & Channel Attribution- Analytics- Ad-words, Email, Mobile, Social Media, Web Analytics - Changing your strategy based on analysis- Recent trends in Digital marketing.

TOTAL : 45 PERIODS

COURSE OUTCOMES:

1. To examine and explore the role and importance of digital marketing in today's rapidly changing business environment.
2. To focusses on how digital marketing can be utilised by organisations and how its effectiveness can be measured.
3. To know the key elements of a digital marketing strategy
4. To study how the effectiveness of a digital marketing campaign can be measured
5. To demonstrate advanced practical skills in common digital marketing tools such as SEO, SEM, Social media and Blogs.

REFERENCES:

1. Fundamentals of Digital Marketing by Puneet Singh Bhatia;Publisher: Pearson Education; First edition (July 2017);ISBN-10: 933258737X;ISBN-13: 978-9332587373.
2. Digital Marketing by Vandana Ahuja ;Publisher: Oxford University Press (April 2015)
3. ISBN-10: 0199455449;ISBN-13: 978-0199455447
4. Marketing 4.0: Moving from Traditional to Digital by Philip Kotler;Publisher: Wiley; 1st edition (April 2017); ISBN10: 9788126566938;ISBN13: 9788126566938;ASIN: 8126566930
5. Ryan, D. (2014). Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation, Kogan Page Limited.
6. Pulizzi,J Beginner's Guide to Digital Marketing , Mcgraw Hill Education.
7. Barker, Barker, Bormann and Neher(2017), Social Media Marketing: A Strategic Approach, 2E South-Western ,Cengage Learning.

COURSE OBJECTIVE:

- To help students understand the transformation in the role of HR functions from being a support function to strategic function.

UNIT I CONTEXT OF SHRM**9**

SHRM - SHRM models - strategic HRM vs Traditional HRM - Barriers to Strategic HR- Adopting an Investment Perspective - Understanding and Measuring Human capital - Human side of corporate strategies - strategic work redesign - Strategic Capability - Bench Marking.

UNIT II HUMAN RESOURCE DEVELOPMENT**9**

Meaning – Strategic framework for HRM and HRD – Vision, Mission and Values – Importance – Challenges to Organisations – HRD Functions - Roles of HRD Professionals - HRD Needs Assessment - HRD practices – Measures of HRD performance – Links to HR, Strategy and Business Goals – HRD Program Implementation and Evaluation – Recent trends –HRD Audit.

UNIT III E-HRM**9**

e- Employee profile– e- selection and recruitment - Virtual learning and Orientation – e - training and development – e-learning strategies- e- Performance management - and Compensation design - Use of mobile applications in HR functions– Development and Implementation of HRIS – Designing HR portals – Issues in employee privacy – Employee surveys online.

UNIT IV CAREER & COMPETENCY DEVELOPMENT**9**

Career Concepts – Roles – Career stages – Career planning and Process – Career development Models– Career Motivation and Enrichment –Managing Career plateaus- Designing Effective Career Development Systems – Competencies and Career Management – Competency Mapping Models – Equity and Competency based Compensation.

UNIT V EMPLOYEE COACHING & COUNSELING**9**

Need for Coaching – Role of HR in coaching – Coaching and Performance – Skills for Effective Coaching – Coaching Effectiveness– Need for Counseling – Role of HR in Counseling - Components of Counseling Programs – Counseling Effectiveness – Employee Health and Welfare Programs.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Understand the relationship of HR strategy with overall corporate strategy, the strategic role of specific HR systems.
2. Appreciate SHRM in the context of changing forms of organisation and will have a better understanding of the tools and techniques used by organizations to meet current challenges.
3. To be more sensitive to cross-cultural issues and understanding of international approaches to dealing with people in organisations. Students will look at HRM in a broader, comparative and international perspective to deal with complex issues and manifold risks.
4. Providing an overview of the counselling and coaching processes and techniques, Developing alternative approach to dealing with problem situations in organisations
5. Understand the career development theories and models and gain necessary self-insight, skills and techniques to become effective HR managers

REFERENCES :

1. Randy L. Desimone, Jon M. Werner – David M. Mathis, Human Resource Development, Cengage Learning, 7th edition, 2016.
2. Jeffrey A Mello, Strategic Human Resource Management, Cengage Learning, 3rd edition, 2011.
3. Paul Boselie. Strategic Human Resource Management. Tata McGraw Hill. 2011
4. Robert L. Mathis and John H. Jackson, Human Resource Management, Cengage Learning, 2007.
5. Pulak Das. Strategic Human Resource Management- A Resource Driven Perspective- Cengage Learning 4th Indian Reprint- 2013.
6. Teresa Torres Coronas & Mario Arias Olivia. e-Human Resource Management- Managing Knowledge People- Idea Group Publishing, 2005.
7. Randall S Schuler and Susan E Jackson. Strategic Human Resource Management. Wiley Publications- 2007.

COURSE OBJECTIVES:

- To explore contemporary knowledge and gain a conceptual understanding of industrial relations.
- To have a broad understanding of the legal principles governing the employment relationship at individual and collective level.

UNIT I INDUSTRIAL RELATIONS**9**

Concept, scope- objectives- Importance - Approaches to IR- Industrial relations system in India. Trade Unions Act, 1926- trade union movement in India- objective -role - functions-procedure for registration of trade unions- Rights and responsibilities- problems- Employee relations in IT sector.

UNIT II INDUSTRIAL CONFLICTS AND LABOUR WELFARE**9**

The Industrial Disputes Act, 1947-Disputes – Impact – Causes – Strikes – Prevention – Industrial Peace – Government Machinery – Conciliation – Arbitration – Adjudication. Labour welfare- statutory- Voluntary- welfare funds-welfare of unorganized labour

UNIT III LABOUR LEGISLATIONS-I**9**

Origin and growth of labour legislation in India- Principles of labour legislations-Factories Act 1948- Minimum Wages Act, 1948- Payment of Wages Act, 1936- Payment of Bonus Act, 1965-

UNIT IV LABOUR LEGISLATIONS-II**9**

The Industrial employment (standing orders) Act, 1946- The Apprentices act, 1961-The Equal Remuneration act, 1976- Payment of Gratuity act 1972- Employee compensation act in 2013

UNIT V LABOUR LEGISLATIONS-III**9**

Employees' Provident fund and Miscellaneous provisions act, 1952- Employees' state insurance (ESI) Act, 1948- Maternity Benefit Act, 1961- Contract Labour Regulations and Abolition Act, 1970 -The Child Labour Prevention and Regulation Act, 1986.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

The student gets to learn about

1. Industrial relations system and Trade unions
2. Industrial Disputes and labour welfare measures
3. Labour legislation introduction and legal provisions for factory workers, wages and Bonus
4. Legal provisions for equal remuneration, gratuity, compensation, industrial employment and Apprenticeship
5. Legal provisions for EPF, ESI, Maternity, contract labours, and child labour prevention.

REFERENCES :

1. Mamoria C.B. and SathishMamoria, Dynamics of Industrial Relations, Himalaya Publishing House, New Delhi, 2016.
2. Kapoor N. D , Elements of Mercantile Law, Sultan Chand, 2014.
3. ArunMonappa, RanjeetNambudiri, PatturajaSelvaraj. Industrial relations &Labour Laws. Tata McGraw Hill. 2012
5. P.K. Padhi, Industrial Laws, PHI, 2017.
6. P.R.N Sinha, InduBala Sinha, Seema PriyadarshiniShekhar. Industrial Relations, Trade Unions and Labour Legislation. Pearson. 2017
7. Tax Mann, Labour Laws, 2018.
8. Srivastava, Industrial Relations and Labour laws, Vikas, 2015.
9. P.N.Singh, Neeraj Kumar. Employee relations Management. Pearson. 2011.
10. Ratna Sen, Industrial Relations in India, Shifting Paradigms, Macmillan India Ltd., New Delhi, 2007.
11. C.S.VenkataRatnam, Globalisation and Labour Management Relations, Response Books, 2007.

COURSE OBJECTIVES:

- To help the students to gain knowledge about the concepts of change management and to acquire the skills required to manage any change effectively
- To understand the concept and techniques of OD and to enable the skills for the application of OD in organizations.

UNIT I ORGANIZATIONAL DESIGN**9**

Organizational Design – Determinants – Components – Basic Challenges of design – Differentiation, Integration, Centralization, Decentralization, Standardization, Mutual adjustment -Mechanistic and Organic Structures- Technological and Environmental Impacts on Design-Importance of Design – Success and Failures in design.

UNIT II ORGANIZATIONAL CHANGE**9**

Meaning, Nature, Forces for change- change agents- Change process-Types and forms of change- Models of change- Resistance to change – individual factors – organizational factors – techniques to overcome change- Change programs –job redesign.

UNIT III ORGANIZATIONAL DEVELOPMENT**9**

Introduction- evolution- basic values and assumptions- foundations of OD- Process of OD- managing the phases of OD- Organizational diagnosis-Process-stages- Techniques-Questionnaire, interview, workshop, task-force- collecting, analyzing- feedback of diagnostic information.

UNIT IV OD INTERVENTION**9**

Human process interventions-Individual, group and inter-group human relations- structure and technological interventions- strategy interventions – sensitivity training – survey feedback, process consultation – team building – inter-group development.

UNIT V ORGANIZATIONAL EVOLUTION AND SUSTENANCE**9**

Organizational life cycle – Models of transformation – Models of Organizational Decision making – Organizational Learning – Innovation, Intrapreneurship and Creativity-HR implications.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

The student gets to learn about

1. The fundamentals of organizational design and structure
2. Change process, types, and models of change in organizations
3. The fundamentals of organizational development
4. Organizational development Interventions
5. Organizational evolution and sustenance

REFERENCES:

1. French & Bell: Organisational Development, McGraw-Hill, 2005
2. Wendell L. French, Cecil H. Bell, Jr, Veena Vohra - Organization Development : Behavioral Science Interventions for Organizational Improvement, Sixth Edition 2017
3. Rajiv Shaw: Surviving Tomorrow: Turnaround Strategies In Organisational Design And Development, Vikas Publishing House.
4. Thomas G. Cummings, Christopher G. Worley: Organisation Development And Change, Thomson Learning.
5. S. Ramnarayan, T. Venkateswara Rao, Kuldeep Singh: Organization Development: Interventions And Strategies, Sage Publications
6. Organization Development, behavioral science interventions for Organization Improvement, Wendell French, Cecil H.Bell, Veena, Jr, Pearson, PHI
7. Change & Knowledge Management-R.L. Nandeshwar, Bala Krishna Jayasimha, Excel Books, 1st Ed.
8. Management of Organizational Change – K Harigopal – Response BOOKS, 2nd editon,2006
9. Organizational, Design, and Change-Gareth R. Jones, 5th Edition, Pearson Education

COURSE OBJECTIVES:

- To develop an understanding of the nature and strategies of negotiation.
- To understand conflict and strategies to resolve the conflict.

UNIT I FUNDAMENTALS OF NEGOTIATION**9**

Nature, Characteristics of negotiation- Dimensions of Negotiation-Structure- Norms & values-Types of Negotiation- Negotiation process- Perception and Preparation-Communication and Influence-Techniques of Negotiation- Issues in negotiation.

UNIT II NEGOTIATION STRATEGIES**9**

strategy and planning for negotiation- Strategy and Tactics for distributive bargaining -Integrative negotiation-Negotiation power- source of power- Cross culture Negotiation-Ethics in negotiation.

UNIT III INTRODUCTION TO CONFLICT MANAGEMENT**9**

Understanding conflict, components, perspective of conflict- Types of conflict- Models of conflict (Process & Structural)-Sources of conflict- Contingency approach, conflict management process, conflict domain, conflict trends, conflict distribution, conflict mapping and tracking-conflict & performance - Advantages & Disadvantages of Conflict.

UNIT IV MANAGING INTERPERSONAL, GROUP AND ORGANIZATIONAL CONFLICT**9**

Individual difference- Personalities & abilities- Interpersonal conflict- Group conflict- Organizational conflict- Dealing with difficult subordinates & boss-Technique to resolve team conflict- organizational conflict strategies.

UNIT V CONFLICT RESOLUTION AND COST**9**

Conflict resolution models-framework model-classical ideas- new developments in conflict resolution- Environmental conflict resolution-gender and conflict resolution-Assessing the cost of workplace conflict.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

The student gets to learn about

1. The fundamentals of Negotiation, Types, process and techniques
2. Strategies and tactics in Negotiation
3. The basics of Conflict management, models, approaches and process
4. Managing interpersonal, group and organizational conflict
5. Conflict resolution models and cost of workplace conflict

REFERENCES:

1. Negotiation - Lewicki, Saunders, Barry, TMGH, 2014
2. Corporate Conflict Management - concepts & skills by Eirene Rout, Nelson Omika, PHI, 2007
3. Negotiation- Communication for diverse settings- Michael Spangle, Sage Publication, 2008
4. Managing conflict and negotiation, B.D. Singh, 1st edition, Excel books, 2008.
5. Conflict Management: Practical guide to develop negotiation strategies, Barbara A Budjac Corvette, Pearson Prentice Hall, 2006, ISBN: 8174466428, 9788174466426
6. Managing Conflict in Organizations, M. Afzalur Rahim, 4th Edition, Transaction Publishers, 2011, ISBN 1412844258, 9781412844253.
7. Negotiation, Harvard Business Essentials, Harvard Business School Press, 2003
8. How to negotiate effectively, David Oliver, The Sunday Times, Kogan Page, 2010
9. Conflict Resolution Techniques by Subbulakshmi, ICFAI University press, 2005

COURSE OBJECTIVES:

- To impart skills in designing analyzing and restructuring reward management systems, policies and strategies.
- To understand the various dimensions of Compensation Management.

UNIT I INTRODUCTION**9**

Compensation - Definition - objectives- principles of compensation formulation- Compensation Design and strategy- theories of wage determination- Wage Structure -types of wages- wage boards- wage policy. Compensation decisions- compensation benchmarking- compensation trends and reward system in India.

UNIT II EMPLOYEE COMPENSATION AND LABOUR MARKET**9**

Macroeconomics of Labour markets- Unemployment and its impact on labour market- Neoclassical microeconomics of labour markets-models, supply and demand-economic model Implications on employee compensation- economic theories and employee compensation- trade -offs - valuation of employee compensation.

UNIT III MANAGING EMPLOYEE BENEFITS AND REWARDS**9**

Nature and types of employee benefits- statutory employee benefits in India- Deferred compensation plan- Non-monetary benefits. Reward - Meaning, Elements, Types- Basic concepts of reward management - Designing reward system- Approaches to reward system- Difference between reward and compensation.

UNIT V PERFORMANCE RELATED COMPENSATION**9**

Performance management system (PMS)-performance objectives - indicators- standards and metric - effective performance modeling-dimensions of performance- competency based pay. Team Compensation – Gain Sharing Incentive Plan – Enterprise Incentive Plan – Profit Sharing Plan- ESOPs

UNIT IV EXECUTIVE AND SALES COMPENSATION PLAN**9**

Executive Compensation – Components, Theories, Design- Relationship between Fixed and variable pay-Executive Incentive Programmes. Sale Compensation plan- design and administration- sales incentives and motivations. Compensation Management in Multi-National organisations.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

The student gets to learn about

1. The basics of Compensation Management and Reward system, Theories and strategies
2. Macro and micro economics of labour market and employee compensation
3. Managing employee benefits and rewards
4. Performance related compensation
5. Executive and sales compensation plans, theories and design

REFERENCES:

1. Richard.I. Henderson: Compensation Management In A Knowledge Based World – Prentice Hall, 2007.
2. Richard Thrope& Gill Homen: Strategic Reward Systems- Prentice-Hall, 2000
3. Reward Management: A Handbook of salary administration by Armstrong, Michael and
4. Marlis, Kogan page business books, 2005
5. Thomas.P. Plannery, David.A. Hofrichter&Paul.E.Platten: People Performance & Pay – Free Press.
6. Michael Armstrong & Helen Murlis: Hand Book Of Reward Management – Crust Publishing House.
7. Joseph.J. Martocchio: Strategic Compensation – A Human Resource Management Approach – Prentice-Hall.
8. Edward.E.Lawler III: Rewarding Excellence (Pay Strategies for the New Economy) – Jossey-Bass.

COURSE OBJECTIVE:

- The course aims to provide students insights to HR practices followed in Global organizations.

UNIT I INTRODUCTION TO IHRM**9**

Definition – Evolution of HRM- Importance of IHRM, Models of IHRM – Matching Model, Harvard Model, Contextual Model, 5p Model, European Model, IHRM policies, Standardization and Localization of HRM practices

UNIT II HRM STRATEGIES**10**

Internationalization and world business – Strategic orientation, IHRM in cross border Mergers and Acquisitions, International Alliances – IHRM & Competitive advantage- Cultural context of IHRM

UNIT III RECRUITMENT AND SELECTION**6**

International Managers staffing – Approaches to staffing – Role of Expatriates – Role of in-patriate – Role of Non expatriates- recruitment and selection methods- Current practices

UNIT IV TRAINING AND DEVELOPMENT, PERFORMANCE APPRAISAL**10**

Expatriate training program, components, types, effectiveness measures, HCN training- Trends in international training and development – repatriation process and training.
International performance Management methods – cultural issues in Performance Management

UNIT V INTERNATIONAL COMPENSATION**10**

Components of international compensation- Approaches to international compensation – Challenges and choices -International Labor Standards – emerging Issues

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

The student gets to learn about

1. the basics of IHRM, models and practices
2. strategic orientation and cultural context towards IHRM
3. International practices on recruitment and selection
4. International perspectives on Training, development, performance appraisal
5. International practices on Compensation management

REFERENCES :

1. Peter J Dowling & D E. Welch: International Human Resource Management, Cengage Learning 7th Edition IE.,2017
2. Monir H. Tayeb: International Human Resource Management,A Multinational Company Perspective Oxford University Press, IE
3. IbraizTarique, Dennis Briscoe&randall, International Human Resource Management- Policies and practices for Multinational Enterprises, Routledge, 5th edition
4. Anne- WilHarZing, Ashly Pinnington, International human Resource Management, 3rd edition, Sage Publication
5. P L Rao, International Human resource Management- Text and Cases, Excel Books
6. Christopher Brewster, Guy Vernon, Paul Sparrow, Elizabeth Houldsworth – International Human Resource Management, Kogan Page Publishers

COURSE OBJECTIVE:

- To help understand the importance of and major decisions in supply chain management for gaining competitive advantage.

UNIT I INTRODUCTION**9**

Supply Chain – Fundamentals, Evolution, Role in Economy, Importance, Decision Phases, Enablers & Drivers of Supply Chain Performance; Supply chain strategy; Supply Chain Performance Measures.

UNIT II SUPPLY CHAIN NETWORK**9**

Distribution Network Design – Role in supply chain, Influencing factors, design options, online sales and distribution network, Distribution Strategies; Network Design in supply chain – Role, influencing factors, framework for network design, Impact of uncertainty on Network Design.

UNIT III PLANNING DEMAND, INVENTORY AND SUPPLY**9**

Managing supply chain cycle inventory and safety inventory - Uncertainty in the supply chain , Analyzing impact of supplychain redesign on the inventory, Risk Pooling, Managing inventory for short life-cycle products, multiple item -multiple location inventory management; Pricing and Revenue Management.

UNIT IV LOGISTICS**9**

Transportation – Role, Modes and their characteristics, infrastructure and policies, transport documentation, design options, trade-offs in transportation design, intermodal transportation. Logistics outsourcing – catalysts, benefits, value proposition. 3PL, 4PL, 5PL, 6PL; International Logistics -objectives, importance in global economy, Characteristics of global supply chains, Incoterms.

UNIT V SUPPLY CHAIN INNOVATIONS**9**

Supply Chain Integration, SC process restructuring, IT in Supply Chain; Agile Supply Chains, Legible supply chain, Green Supply Chain, Reverse Supply chain; Supply chain technology trends – AI, Advanced analytics, Internet of Things, Intelligent things, conversational systems, robotic process automation, immersive technologies, Blockchain.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Understanding of supply chain fundamentals
2. Ability to design supply chain networks to enhance supply chain performance
3. Ability to plan demand based on inventory and supply
4. Understanding the role of logistics in supply chain performance
5. Awareness of innovations for sustainable supply chains

REFERENCES:

1. Sunil Chopra, Peter Meindl and DharamVirKalra, Supply Chain Management-Strategy Planning and Operation, Pearson Education, Sixth Edition, 2016.
2. Janat Shah, Supply Chain Management – Text and Cases, Pearson Education, 2009
3. Ballou Ronald H, Business Logistics and Supply Chain Management, Pearson Education, 5th Edition, 2007.
4. David Simchi-Levi, Philip Kaminsky, Edith Simchi-Levi, Designing and Managing the Supply Chain: Concepts, Strategies, and Cases, Tata McGraw-Hill, 2005.
5. Pierre David, International Logistics, Biztantra, 2011.

COURSE OBJECTIVE:

- To learn the various principles and practices of Quality Management

UNIT I INTRODUCTION**9**

Introduction - Need for quality - Evolution of quality - Definition of quality. Concept of Quality –different perspectives. Concept of total Quality – Design, inputs, process and output - Attitude and involvement of top management. Customer Focus – customer perception - customer retention. Dimensions of product and service quality. Cost of quality.

UNIT II QUALITY MANAGEMENT PHILOSOPHIES AND PRICIPLES**9**

Quality Gurus - Crosby, Deming, Masaaki Imai, Feigenbaum, Ishikawa, Juran, Oakland, ShigeoShingo, and Taguchi. Concepts of Quality circle, Japanese 5S principles and 8D methodology.

UNIT III STATISTICAL PROCESS CONTROL**9**

Statistical Process Control (SPC) – Meaning, Significance. construction of control charts for variables and attributes. Process capability – meaning, significance and measurement. Six sigma- concepts of process capability. Reliability concepts – definitions, reliability in series and parallel, product life characteristics curve. Total productive maintenance (TMP), Terotechnology. Business process Improvement (BPI) – principles, applications, reengineering process, benefits and limitations.

UNIT IV QUALITY TOOLS AND TECHNIQUES**9**

Quality Tools - The seven traditional tools of quality, New management tools.Six-sigma, Bench marking, Poka-yoke, Failure Mode Effect Analysis (FMEA) – reliability, failure rate, FMEA stages, design, process and documentation. Quality Function Deployment (QFD) – Benefits, house of quality. Taguchi - quality loss function, parameter and tolerance design, signal to noise ratio.

UNIT V QUALITY MANAGEMENT SYSTEMS**9**

Introduction Quality management systems – IS/ISO 9004:2000 – Quality System –Elements, Documentation guidelines for performance improvements. Quality Audits - QS 9000 – ISO 14000 – Concepts. TQM -culture, framework, benefits, awareness and obstacles. Employee involvement – Motivation, empowerment, Team and Teamwork, Recognition and Reward, Performance appraisal. Supplier - Selection, Partnering, Supplier Rating.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Understanding the evolution of Quality management
2. Understanding of quality philosophies and practices
3. Ability to apply statistical process control to enhance quality.
4. Ability to apply quality tools to enhance organization's quality performance
5. Awareness of quality management systems

REFERENCES:

1. Dale H.Besterfield, CarolBesterfield-Michna, Glen H. Besterfield, Mary Besterfield -Sacre, Hemant Urdhwareshe, Rashmi Urdhwareshe, Total Quality Management (TQM), Fifth edition, Pearson Education, 2018.
2. Shridhara Bhat K, Total Quality Management – Text and Cases, Himalaya Publishing House, First Edition 2010
3. PoornimaM.Charantimath, Total Quality Management, Pearson Education, Second Edition, 2011.
4. Douglas C. Montgomery, Introduction to Statistical Quality Control, Wiley Student Edition4th Edition, Wiley India Pvt Limited, 2008.
5. Indian standard – quality management systems – Guidelines for performance improvement (Fifth Revision), Bureau of Indian standards, New Delhi.
6. Panneerselvam.R, Sivasankaran. P, Quality Management, PHI Learning, 2014.

COURSE OBJECTIVE :

- To understand why materials management should be considered for profit in operations

UNIT I INTRODUCTION**9**

Operating environment-aggregate planning-role, need, strategies, costs techniques, approaches-master scheduling-manufacturing planning and control system-manufacturing resource planning-enterprise resource planning-making the production plan

UNIT II MATERIALS PLANNING**9**

Materials requirements planning-bill of materials-resource requirement planning-manufacturing resource planning-capacity management-scheduling orders-production activity control-codification.

UNIT III INVENTORY MANAGEMENT**9**

Policy Decisions-objectives-control -Retail Discounting Model, Newsvendor Model; Review of deterministic models, Probabilistic inventory models.

UNIT IV PURCHASING MANAGEMENT**9**

Establishing specifications-selecting suppliers-price determination-forward buying-mixed buying strategy-price forecasting-buying seasonal commodities-purchasing under uncertainty-demand management-price forecasting-purchasing under uncertainty-purchasing of capital equipment-international purchasing

UNIT V WAREHOUSE MANAGEMENT**9**

Warehousing functions – types - Stores management-stores systems and procedures-incoming materials control-stores accounting and stock verification-Obsolete, surplus and scrap-value analysis-material handling-transportation and traffic management -operational efficiency-productivity-cost effectiveness-performance measurement

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Understanding basics of materials management
2. Understanding requirement analysis for material planning
3. Ability to apply inventory management models
4. Understanding purchasing practices
5. Understanding storage in warehouse

REFERENCES :

1. J.R.Tony Arnold, Stephen N. Chapman, Lloyd M. Clive, Materials Management, Pearson, 2012.
2. P. Gopalakrishnan, Purchasing and Materials Management, Tata McGraw Hill, 2012
3. A.K.Chitale and R.C.Gupta, Materials Management, Text and Cases, PHI Learning, 2nd Edition, 2006
4. A.K.Datla, Materials Management, Procedure, Text and Cases, PHI Learning, 2nd Edition, 2006
5. Ajay K Garg, Production and Operations Management, Tata McGraw Hill , 2012
6. Ronald H. Ballou and Samir K. Srivastava, Business Logistics and Supply Chain Management, Pearson education,Fifth Edition
7. S. N. Chary, Production and Operations Management, Tata McGraw Hill , 2012

COURSE OBJECTIVE:

- To help understand how service performance can be improved by studying services operations management

UNIT I INTRODUCTION**9**

Services – Importance, role in economy, service sector – nature, growth. Nature of services - distinctive characteristics, Service Package, Service classification, service-dominant logic, open-systems view. Service Strategy –Strategic service vision, competitive environment, generic strategies, winning customers; Role of information technology; stages in service firm competitiveness.

UNIT II SERVICE DESIGN**9**

New Service Development – Design elements – Service Blue-printing - process structure – generic approaches. Service Encounter – triad, creating service orientation, service profit chain; Front-office Back-office Interface– service decoupling. Technology in services – self-service, automation, e-commerce, e-business, technology innovations.

UNIT III SERVICE QUALITY**9**

Service Quality- Dimensions, Service Quality Gap Model; Measuring Service Quality –SERVQUAL, Walk-through Audit, Quality service by design , Service Recovery, Service Guarantees. Process Improvement –productivity improvement - DEA, quality tools, benchmarking, Quality improvement programs.

UNIT IV SERVICE FACILITY**9**

Supporting facility -Service scapes, Facility design – nature, objectives, process analysis, Service facility layout. Service Facility Location – considerations, facility location techniques – metropolitan metric, Euclidean, centre of gravity, retail outlet location, location set covering problem. Vehicle routing and Scheduling.

UNIT V MANAGING CAPACITY AND DEMAND**9**

Managing Demand – strategies; Managing capacity – basic strategies, supply management tactics, operations planning and control; Yield management; Inventory Management in Services– Retail Discounting Model, Newsvendor Model; Managing Waiting Lines –Queuing systems, psychology of waiting; Managing for growth- expansion strategies, franchising , globalization.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Appreciation of nature of service operations
2. Ability to design services
3. Ability to inculcate quality in service design and delivery
4. Apply models to design service facility
5. Ability to grow and sustain service business

REFERENCES:

1. James A. Fitzsimmons, Mona J, Fitzsimmons, Sanjeev Bordoloi, Service Management – Operations, Strategy, Information Technology, McGraw-Hill Education – 8th Edition 2018.
2. Richard D. Metters, Successful Service Operations Management, Cengage Learning, 2nd Edition, 2012.
3. Cengiz Haksever, Barry Render, Service Management, Pearson Education, 2013.
4. Robert Johnston, Graham Clark, Service Operations Management, Pearson Education, 2nd Edition, 2005.
5. Bill Hollins and Sadie Shinkins, Managing Service Operations, Sage, 2006.

COURSE OBJECTIVE:

- To treat the subject in depth by emphasizing on the advanced quantitative models and methods in logistics and supply chain management and its practical aspects and the latest developments in the field.

UNIT I INTRODUCTION**9**

Introduction to analytics – descriptive, predictive and prescriptive analytics, Data Driven Supply Chains – Basics, transforming supply chains, Barriers to implementation, Road Map.

UNIT II WAREHOUSING DECISIONS**9**

Mathematical Programming Models - P-Median Methods - Guided LP Approach - Balmer – Wolfe Method, Greedy Drop Heuristics, Dynamic Location Models, Space Determination and Layout Methods

UNIT III INVENTORY MANAGEMENT**9**

Inventory aggregation Models, Dynamic Lot sizing Methods, Multi-Echelon Inventory models, Aggregate Inventory system and LIMIT, Risk Analysis in Supply Chain - Measuring transit risks, supply risks, delivering risks, Risk pooling strategies.

UNIT IV TRANSPORTATION NETWORK MODELS**9**

Notion of Graphs, Minimal Spanning Tree, Shortest Path Algorithms, Maximal Flow Problems, Multistage Transshipment and Transportation Problems, Set covering and Set Partitioning Problems, Traveling Salesman Algorithms, Advanced Vehicle Routing Problem Heuristics, Scheduling Algorithms-Deficit function Approach and Linking Algorithms

UNIT V MCDMMODELS**9**

Analytic Hierarchy Process(AHP), Data Envelopment Analysis (DEA), Fuzzy Logic and Techniques, the analytical network process (ANP), TOPSIS-Application in SCM

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Understanding of supply chain analytics fundamentals
2. Ability to design warehouse models to enhance supply chain performance.
3. Ability to analyse models and strategies in inventory management.
4. Ability to understand network models in transportation.
5. Ability to make decision using multi-criteria in applications of SCM

REFERENCES :

1. Nada R. Sanders, Big data driven supply chain management: A framework for implementing analytics and turning information into intelligence, Pearson Education, 2014.
2. Michael Watson, Sara Lewis, Peter Cacioppi, Jay Jayaraman, Supply Chain Network Design: Applying Optimization and Analytics to the Global Supply Chain, Pearson Education, 2013.
3. Anna Nagurney, Min Yu, Amir H. Masoumi, Ladimer S. Nagurney, Networks Against Time: Supply Chain Analytics for Perishable Products, Springer, 2013.
4. Muthu Mathirajan, ChandrasekharanRajendran, SowmyanarayananSadagopan, ArunachalamRavindran, ParasuramBalasubramanian, Analytics in Operations/Supply Chain Management , I.K. International Publishing House Pvt. Ltd., 2016.
5. Gerhard J. Plenert, Supply Chain Optimization through Segmentation and Analytics, CRC Press, Taylor & Francis Group, 2014.

COURSE OBJECTIVE:

- To learn the fundamental principles and practices of managing projects.

UNIT I INTRODUCTION TO PROJECT MANAGEMENT 9

Project Management – Definition –Goal - Lifecycles. Project Environments. Project Manager – Roles- Responsibilities and Selection.

UNIT II PLANNING, BUDGETING AND RISK MANAGEMENT 9

The Planning Process – Work Break down Structure. Cost Estimating and Budgeting - Process, Summaries, schedules and forecasts. Managing risks - concepts, identification, assessment and response planning.

UNIT III SCHEDULING & RESOURCE ALLOCATION 9

PERT & CPM Networks - Project durations and floats - Crashing – Resource loading and leveling. Simulation for resource allocation. Goldratt's Critical Chain.

UNIT IV PROJECT ORGANISATION & CONFLICT MANAGEMENT 9

Formal Organisation Structure – Organisation Design – Types of project organizations. Conflict – Origin & Consequences. Project Teams. Managing conflict – Team methods for resolving conflict.

UNIT V CONTROL AND COMPLETION 9

Project Control – Process, Monitoring, Internal and External control, Performance analysis, Performance Index Monitoring. Project Evaluation, Reporting and Termination. Project success and failure - Lessons.

TOTAL: 45 PERIODS

COURSE OUTCOMES:

1. Ability to understand the roles and responsibilities of a project manager
2. Ability to plan and budget projects
3. Ability to schedule and allocate resources to projects
4. Ability to manage project organization
5. Ability to control and complete projects

REFERENCES :

1. John M. Nicholas, Project Management for Business and Technology - Principles and Practice, Second Edition, Pearson Education, 2006.
2. Clifford Gray and Erik Larson, Project Management, Tata McGraw Hill Edition, 2005.
3. Gido and Clements, Successful Project Management, Seventh Edition, Thomson Learning, 2017.
4. Samuel J.M., Jack R.M., Scott M.S., Margaret M.S., and Gopalan M.R., Project Management, First Indian edition, Wiley-India, 2006.
5. Harvey Maylor, Project Management, Third Edition, Pearson Education, 2006.
6. Panneerselvam. R, Senthilkumar. P, Project Management, PHI Learning, 2009.

COURSE OBJECTIVES:

- To know how to derive meaning from huge volume of data and information
- To understand how knowledge discovering process is used in business decision making.

UNIT I INTRODUCTION**9**

Data mining, Text mining, Web mining, Spatial mining, Process mining, Data ware house and datamarts.

UNIT II DATA MINING PROCESS**9**

Datamining process – KDD, CRISP-DM, SEMMA and Domain-Specific, Classification and Prediction performance measures -RSME, MAD, MAP, MAPE, Confusion matrix, Receiver Operating Characteristic curve & AUC; Validation Techniques - hold-out, k-fold cross-validation, LOOCV, random subsampling, and bootstrapping.

UNIT III PREDICTION TECHNIQUES**9**

Data visualization, Time series – ARIMA, Winter Holts, Vector Autoregressive analysis, Multivariate regression analysis.

UNIT IV CLASSIFICATION AND CLUSTERING TECHNIQUES**9**

Classification- Decision trees, k nearest neighbour, Logistic regression, Discriminant analysis; Clustering; Market basket analysis;

UNIT V MACHINE LEARNING AND AI**9**

Genetic algorithms, Neural network, Fuzzy logic, Support Vector Machine, Optimization techniques – Ant Colony, Particle Swarm, DEA

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Learn to apply various data mining techniques into various areas of different domains.
2. Be able to interact competently on the topic of data mining for business intelligence.
Know the basics of data mining processes, algorithms, & systems well enough to interact with CTOs, expert data miners, consultants, etc.
3. Apply various prediction techniques.
4. Learn about supervised and unsupervised learning technique.
5. Develop and implement a basic trainable neural network (or) a fuzzy logic system to design and manufacturing

REFERENCES:

1. Jaiwei Ham and Micheline Kamber, Data Mining concepts and techniques, Kauffmann Publishers 2006
2. Efraim Turban, Ramesh Sharda, Jay E. Aronson and David King, Business Intelligence, Prentice Hall, 2008.
3. W.H.Inmon, Building the Data Warehouse, fourth edition Wiley India pvt. Ltd. 2005.
4. Ralph Kimball and Richard Merz, The data warehouse toolkit, John Wiley, 3rd edition, 2013.
5. Michel Berry and Gordon Linoff, Mastering Data mining, John Wiley and Sons Inc, 2nd Edition, 2011
6. Michel Berry and Gordon Linoff, Data mining techniques for Marketing, Sales and Customer support, John Wiley, 2011
7. G. K. Gupta, Introduction to Data mining with Case Studies, Prentice hall of India, 2011
8. Giudici, Applied Data mining – Statistical Methods for Business and Industry, John Wiley. 2009
9. Elizabeth Vitt, Michael Luckevich, Stacia Misner, Business Intelligence, Microsoft, 2011
10. Michalewicz Z., Schmidt M. Michalewicz M and Chiriack C, Adaptive Business Intelligence, Springer – Verlag, 2007
11. Galit Shmueli, Nitin R. Patel and Peter C. Bruce, Data Mining for Business Intelligence – Concepts, Techniques and Applications Wiley, India, 2010.

COURSE OBJECTIVES:

- To expose various algorithms related to Deep Learning and Artificial Intelligence.
- To prepare students to apply suitable algorithm for the specified applications.

UNIT I DEEP NETWORKS**9**

Deep Networks: Modern Practices: Deep Forward Networks: Example: Learning XOR - Gradient-Based Learning - Hidden Units - Architecture Design - Regularization for Deep Learning.

UNIT II MODELS**9**

Optimization for Training Deep Models: How Learning Differs from Pure Optimization - Challenges in Neural Network Optimization - Basic Algorithms - Parameter Initialization Strategies - Algorithms with Adaptive Learning Rates - Approximate Second-Order Methods - Optimization Strategies and Meta-Algorithms.

UNIT III INTELLIGENT SYSTEMS**9**

Introduction to Artificial Intelligence: Intelligent Systems - Foundations of AI - Applications - Tic-Tac-Toe Game Playing - Problem Solving: State-Space Search and Control Strategies: Introduction - General Problem Solving - Exhaustive Searches - Heuristic Search Techniques.

UNIT IV KNOWLEDGE REPRESENTATION**9**

Advanced Problem-Solving Paradigm: Planning: Introduction - Types of Planning Systems - Knowledge Representation: Introduction - Approaches to Knowledge Representation - Knowledge Representation using Semantic Network - Knowledge Representation using Frames.

UNIT V APPLICATIONS**9**

Expert Systems and Applications: Blackboard Systems - Truth Maintenance Systems - Applications of Expert Systems - Machine-Learning Paradigms: Machine-Learning Systems - Supervised and Unsupervised Learnings.

TOTAL : 45 PERIODS**COURSE OUTCOMES:**

1. Knowledge of Algorithms of Deep Learning & Artificial Intelligence.
2. Knowledge of applying Algorithm to specified applications.
3. Ability to understand intelligent systems and Heuristic Search Techniques
4. Understanding of Knowledge Representation, Semantic Networks and Frames
5. Knowledge Of Expert systems, applications and Machine learning

REFERENCES:

1. Ian Goodfellow, YoshuaBengio, Aaron Courville, "Deep Learning", MIT Press, 2016.
2. Li Deng and Dong Yu, "Deep Learning Methods and Applications", Foundations and Trends in Signal Processing.
3. YoshuaBengio, "Learning Deep Architectures for AI", Foundations and Trends in Machine Learning.
4. SarojKaushik, "Artificial Intelligence", Cengage Learning India Pvt. Ltd.
5. Deepak Khemani, "A First Course in Artificial Intelligence", McGraw Hill Education(India) Private Limited, NewDelhi.
6. Elaine Rich, Kevin Night, Shivashankar B Nair, "Artificial Intelligence" Third Edition, McGraw Hill, 2008.

COURSE OBJECTIVE:

- To showcase the opportunities that exist today to leverage the power of the web and social media

UNIT I INTRODUCTION 9

Evolution of online communities - History and Evolution of Social Media- Social Media vs. traditional media - Social Media Audience and Goals for using Social Media - Understanding Social Media: Strong and weak ties – Influencers - How ideas travel – Viralness - Social theory and social media - technological determinism in popular discourse on social media technologies.

UNIT II COMMUNITY BUILDING AND MANAGEMENT 9

Science of Social Media - Keys to Community Building - Promoting Social Media Pages- Linking Social Media Accounts-The Viral Impact of Social Media-Digital PR-Encourage Positive Chatter in Social Media - Identity in social media: formation of identities, communities, activist movements, and consumer markets - Social Media as business.

UNIT III SOCIAL MEDIA POLICIES AND MEASUREMENTS 9

Social Media Policies-Etiquette, Privacy- ethical problems posed by emerging social media technologies - The road ahead in social media- The Basics of Tracking Social Media - social media analytics- Insights Gained From Social Media- Customized Campaign Performance Reports - Observations of social media use.

UNIT IV WEB ANALYTICS 9

Web Analytics - Present and Future, Data Collection - Importance and Options, Overview of Qualitative Analysis, Business Analysis, KPI and Planning, Critical Components of a Successful Web Analytics Strategy, Web Analytics Fundamentals, Concepts, Proposals & Reports, Web Data Analysis.

UNIT V SEARCH ANALYTICS 9

Search engine optimization (SEO), non-linear media consumption, user engagement, usergenerated content, web traffic analysis, navigation, usability, eye tracking, online security, online ethics, content management system, data visualization, RSS feeds, Mobile platforms, User centered design, Understanding search behaviors.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. The students will be able to enhance the social media skills.
2. The students will be able to develop a mass communication strategy and guide campaigns.
3. To get an idea of social media policies.
4. Understand the fundamentals and concepts of web analytics.
5. How to effectively use the resulting insights to support website design decisions, campaign optimisation, search analytics, etc.

REFERENCES:

1. K. M. Shrivastava, Social Media in Business and Governance, Sterling Publishers Private Limited, 2013
2. Christian Fuchs, Social Media a critical introduction, SAGE Publications Ltd, 2014
3. Bittu Kumar, Social Networking, V & S Publishers, 2013
4. Avinash Kaushik, Web Analytics - An Hour a Day, Wiley Publishing, 2007
5. ric T. Peterson, Web Analytics Demystified, Celilo Group Media and Café Press, 2004
6. TakeshiMoriguchi, Web Analytics Consultant Official Textbook, 7th Edition, 2016

COURSE OBJECTIVE:

- To understand the practices and technology to start an online business.

UNIT I INTRODUCTION TO e-BUSINESS**8**

e-business, e-business vs e-commerce, Economic forces – advantages – myths – e-business models, design, develop and manage e-business, Web 2.0 and Social Networking, Mobile Commerce, S-commerce

UNIT II TECHNOLOGY INFRASTRUCTURE**10**

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

UNIT III BUSINESS APPLICATIONS**10**

Consumer oriented e-business – e-tailing and models - Marketing on web – advertising, e-mail marketing, affiliated programs - e-CRM; online services, Business oriented e-business, e-governance, EDI on the internet, Delivery management system, Web Auctions, Virtual communities and Web portals – social media marketing

UNIT IV e-BUSINESS PAYMENTS AND SECURITY**9**

E-payments - Characteristics of payment of systems, protocols, e-cash, e-cheque and Micro payment systems- internet security – cryptography – security protocols – network security.

UNIT V LEGAL AND PRIVACY ISSUES**8**

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

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Ability to build and manage an e-business.
2. Knowledge about Technology Infrastructure
3. Understanding of customer oriented business applications
4. Knowledge of e business payment protocols and security
5. Understanding of ethical, legal , privacy issues and encryption policies

REFERENCES:

1. Harvey M.Deitel, Paul J.Deitel, Kate Steinbuhler, e-business and e-commerce for managers, Pearson, 2011.
2. Efraim Turban, Jae K. Lee, David King, Ting Peng Liang, Deborrah Turban, Electronic Commerce – A managerial perspective, Pearson Education Asia, 2010.
3. Parag Kulkarni, SunitaJahirabadkao, Pradeep Chande, e business, Oxford University Press, 2012.
4. Hentry Chan &el , E-Commerce – fundamentals and Applications, Wiley India Pvt Ltd, 2007.
5. Gary P. Schneider, Electronic commerce, Thomson course technology, Fourth annual edition, 2007
6. Bharat Bhasker, Electronic Commerce – Frame work technologies and Applications, 3rd Edition. Tata McGrawHill Publications, 2009
7. KamleshK.Bajaj and Debjani Nag, Ecommerce- the cutting edge of Business, Tata McGraw Hill Publications, 7th reprint, 2009.
8. Kalakota et al, Frontiers of Electronic Commerce, Addison Wesley, 2004
9. MichealPapaloelon and Peter Robert, e-business, Wiley India, 2006.

COURSE OBJECTIVES:

- To exhibit the theoretical aspects of Enterprise Resource Planning.
- To provide practical implication on ERP Suite implementation.

UNIT I INTRODUCTION**8**

Overview of enterprise systems – Evolution - Risks and benefits - Fundamental technology - warehouse management.

UNIT II ERP SOLUTIONS AND FUNCTIONAL MODULES**10**

Overview of ERP software solutions, BPR, Project management, Functional modules-Organisational data, master data and document flow.

UNIT III ERP IMPLEMENTATION**10**

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

UNIT IV POST IMPLEMENTATION**8**

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

UNIT V EMERGING TRENDS ON ERP**9**

Extended ERP systems and ERP add-ons -CRM, SCM, Business analytics - Future trends in ERP systems-web enabled, Wireless technologies, cloud computing and Augmented reality.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Knowledge of risk and benefits associated with Enterprise Resource Planning.
2. Knowledge of ERP solutions and functional modules
3. Exposure to the implementation environment
4. Understanding of post implementation impact and maintenance of ERP
5. Knowledge of emerging trends on ERP

REFERENCES:

1. Alexis Leon, ERP demystified, second Edition Tata McGraw-Hill, 2008.
2. Simha R. Magal , Jeffrey Word, Integrated Business processes with ERP systems, John Wiley & Sons, 2012.
3. Jagan Nathan Vaman, ERP in Practice, Tata McGraw-Hill, 2008
4. Alexis Leon, Enterprise Resource Planning, second edition, Tata McGraw-Hill, 2008.
5. Mahadeo Jaiswal and Ganesh Vanapalli, ERP Macmillan India, 2009
6. Vinod Kumar Grag and N.K. Venkitakrishnan, ERP- Concepts and Practice, Prentice Hall of India, 2006.
7. Summer, ERP, Pearson Education, 2008.

SECTORAL SPECIALISATION IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT

BA4051

SUPPLY CHAIN CONCEPTS AND PLANNING

L T P C
3 0 0 3

COURSE OBJECTIVES:

- To describe the various streams of the supply chain
- To describe the drivers of the supply chain
- To describe the concepts employed in the supply chain
- To explain about the strategies employed in the supply chain

UNIT- I CONCEPTS OF SUPPLY CHAIN

9

Service and manufacturing supply chain dynamics - Evolution of supply chain management -Multiple views and flows - Service supply chains -Manufacturing supply chains - Measures of supply chain performance - Differentiation-Bullwhip effect

UNIT - II SUPPLY CHAIN PROCESSES AND STRATEGIES

9

Integrated supply chains design - Customer relationship process - Order fulfilment process - Supplier relationship process - Supply chain strategies - Strategic focus - Mass customization - Lean supply chains - Outsourcing and offshoring - Virtual supply chains.

UNIT - III SUPPLY CHAIN PERFORMANCE DRIVERS AND FORECASTING

9

Drivers of supply chain performance - Logistics drivers (Location, inventory and transportation) -Cross functional drivers (Pricing, information and sourcing) – Forecasting introduction -Framework for a forecast system - Choosing right forecasting technique - Judgment methods (Composite Forecasts, Surveys, Delphi Method, Scenario Building, Technology Forecasting, Forecast by Analogy) - Causal methods (Regression Analysis -Linear & Non-Linear Regression, Econometrics) - Time series analysis (Autoregressive Moving Average (ARMA), Exponential Smoothing, Extrapolation, Linear Prediction, Trend Estimation, Growth Curve, Box-Jenkins Approach) – CPFR

UNIT - IV SALES AND OPERATIONS PLANNING

9

Introduction to Sales and operations planning - Purpose of sales and operations plans -Decision context - Sales and operations planning as a process - Overview of decision support tools

UNIT- V RESOURCE PLANNING AND SCHEDULING

9

Enterprise resource planning - Planning and control systems for manufacturers – Materials requirement planning - Drum – Buffer – Rope system – Scheduling - Scheduling service and manufacturing processes - Scheduling customer demand - Scheduling employees - Operations scheduling.

TOTAL: 45 PERIODS

COURSE OUTCOMES:

The students will be able to

- Identify the concepts of supply chain.
- Analyze supply chain dynamics and various issues of supply chain performance.

TEXT BOOKS:

1. Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 2010.
2. Janat Shah, Supply Chain Management, Pearson Education India, 2009
3. Supply Chain management, Chandrasekaran,N., Oxford University Publications, 2010
4. Supply Chain Management for The 21st Century by B S SAHAY. Macmillan Education, 2001

COURSE OBJECTIVES

- To provide understanding of the framework.
- To illustrate current practices in industries.
- To provide knowledge on certain tools & techniques

UNIT - I INTRODUCTION TO PURCHASING AND SUPPLY CHAIN MANAGEMENT 9

The Purchasing Process. Purchasing Policies and Procedures. Supply Management Integration for Competitive Advantage, Purchasing and Supply Management Organization.

UNIT - II STRATEGIC SOURCING 9

Supply Management and Commodity Strategy Development, Supplier Evaluation and Selection Supplier Quality Management Supplier Management and Development, Creating a World-Class Supply Base, Worldwide Sourcing.

UNIT - III STRATEGIC SOURCING PROCESS 9

Strategic Cost Management, Purchasing and Supply Chain Analysis: Tools and Techniques, Negotiation and Conflict Management Contract Management Purchasing Law and Ethics.

UNIT - IV SUPPLIER PERFORMANCE AND QUALITY MANAGEMENT 9

Performance Measurement and Evaluation: Strategies, tools and techniques for measuring and managing supplier performance, Supplier performance evaluation, Purchasing services, Supply Chain Information Systems and Electronic Sourcing.

UNIT - V FUTURE DIRECTIONS 9

Purchasing and Supply Strategy Trends Green Buying, Sustainability, material research, Lean supply Chain Management

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

- To understand basic functions and nuances.
- To understand the holistic dimensions of SCM & corporate perspectives.
- Learn to acquire skills to become a sourcing professional.

TEXT BOOKS:

1. Purchasing and Supply Chain Management, Robert .M. Monczka, Handfield, Glunipero Paterson, Waters, 6th Edition, Cengage Publication
2. Purchasing and Supply Chain Management, Benton, 3 rd Edition, Tata Mc Graw Hill.
3. World Class Supply Chain Management, Burt, Dobler, Starling, 7th Edition, Tata Mc Graw Hill.
4. Supply Chain Management for The 21st Century by B S SAHAY. Macmillan Education,2001

COURSE OBJECTIVE:

This course provides you the basic concepts and advanced models in inventory management. This course discusses issues related to inventory in a supply chain context. It also gives a multi-dimensional view to approach a problem with case studies.

UNIT I INTRODUCTION TO INVENTORY MANAGEMENT 9

Inventory in SCM, Cash to cash cycle time, measure of inventory in terms of days, Inventory turnover ratio and its relationship with working capital, Review of models, Q-models and P-models Aggregation of Inventory, Cycle stock concepts, Ordering multiple items in a single order to reduce cycle stock

UNIT II INVENTORY MODELS 9

Safety stock issues Safety stock with lead time and demand uncertainty (for Q-models), Short term discounting & Forward Buying, Periodic review models with safety stock, Comparison of P and Q systems

UNIT III INVENTORY MANAGEMENT STRATEGIES 9

Single period models, Inventory management for fashion supply chains, Postponement strategies to reduce inventory, Examples of Fashion supply chains: NFL Reebok, ZARA and Sport Obermeyer Risk Pooling, Applications, Risk pooling in different forms-Substitution, Specialisation, Postponement and Information pooling

UNIT IV INVENTORY OPTIMIZATION 9

Distribution resource planning techniques, Inventory and transportation integration decisions, Vendor Managed Inventory, Product availability measures, Product fill rate, order fill rate, Cycle service level.

UNIT V LATEST TRENDS IN INVENTORY MANAGEMENT SYSTEMS 9

Industry initiatives, Efficient consumer Response and Quick response ,CPFR and other industry initiatives, Inventory reduction strategies, Managing inventory in Reverse Logistics and Remanufacturing situations , Best practices in Inventory Management in a Supply Chain

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

At the end of this course, the students can confidently approach their supply chain inventory issues and they can use different tools appropriately to solve the problems and enhance the performance of their supply chains.

TEXT BOOKS:

1. Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 2010.
2. Janat Shah, Supply Chain Management, Pearson Education India, 2009
3. Supply chain management, Chandrasekaran,N., Oxford University Publications, 2010
4. Supply Chain Management For The 21st Century by B S SAHAY. Macmillan Education,2001

COURSE OBJECTIVES:

- To explain the various technological aspects that are described in the different logistical background
- To explain the real time description updated technologies in the logistics sector and supply chain industry

UNIT - I ELECTRONIC SCM, COMMUNICATION NETWORKS 9

Introduction e-SCM – e-SCM framework - Key success factors for e-SCM - Benefits of e-SCM- Positioning information in Logistics - Strategic information linkage - Supply chain communication networks - Role of communication networks in supply chains - Overview of telecommunication networks –EDI - Data security in supply chain networks - Overview of internet able models

UNIT - II ENTERPRISE INFORMATION SYSTEMS 9

Overview of enterprise information systems - Information functionality and principles -Introduction enterprise information systems -Classification of enterprise information systems- Information architecture -Framework for managing supply chain information - Describe on popular enterprise application packages -Benefits of enterprise information systems

UNIT - III SCM SYSTEMS DEVELOPMENT, DEPLOYMENT AND MANAGEMENT 9

Stakeholders in supply chain information systems - Stakeholders in SCM - Stakeholders in supply chain information systems - Information systems development- Logistics information systems design- Defining enterprise architecture - Choosing appropriate system development methodologies - Adopting relevant systems development model

UNIT - IV DEPLOYMENT AND MANAGEMENT 9

Information systems deployment - IT Operations and infrastructure management - Portfolio, programme and project management - Management of risk - Management of value

UNIT - V INFORMATION INTEGRATION 9

Enterprise application integration and supply chain visibility - Enterprise application integration - Supply chain visibility - Supply chain event management -Supply chain performance -Planning and design methodology - Problem definition and planning - Data collection and analysis - Recommendations and implementation -Decision support systems

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

The students will be able to understand the various enterprise information system and its architecture and benefits. Students can gain knowledge about various e-commerce models, e-SCM, benefits and communication networks.

TEXT BOOKS:

1. Bowersox & Closs, Logistical Management, McGraw-Hill Companies, 1996.
2. R.H.Ballou, Business Logistics Management, Prentice-Hall, 2004.

REFERENCES:

1. Strauss,E-Marketing, 4/e, Pearson Education 2008
2. Chaffey, E- Business and E- Commerce Management, 3/e, Pearson Education 2008
3. Blanchard, Logistics Engineering & Management, 6/e, Pearson Education 2008
4. Statistics for Managers Using MS Excel, 4/e, Levine, Pearson Education 2007
5. Donald J. Bowersox and David J. Closs, Logistical Management - The Integrated Supply chain

COURSE OBJECTIVES:

- To help the students in explaining the significance of Warehousing.
- To provide timely customer service,
- To keep track of items so they can be found readily & correctly
- To minimize the total physical effort
- To minimize the cost of moving goods in & out of stage.

UNIT - I INTRODUCTION WAREHOUSING 9

Introduction Warehousing – Basic Warehousing Decisions – Warehouse Operations – Types of Warehouses – Functions – Centralized & Decentralized – Storage Systems – Warehousing Cost Analysis – Warehouse Layout – Characteristics of Ideal Warehouse

UNIT - II INVENTORY MANAGEMENT 9

Inventory: Basic Concepts – Role in Supply Chain – Role in Competitive Strategy – Independent Demand Systems – Dependent Demand Systems – Functions – Types – Cost – Need for Inventory – Just in Time

UNIT - III INVENTORY CONTROL 9

Inventory Control – ABC Inventory Control – Multi-Echelon Inventory Systems – Distribution Requirement Planning – Bull Whip Effect – Using WMS for Managing Warehousing Operations

UNIT - IV MATERIALS HANDLING 9

Principles and Performance Measures Of Material Handling Systems – Fundamentals of Material Handling – Various Types of Material Handling Equipments – Types of Conveyors – Refrigerated Warehouses- Cold Chain- Agri SCM

UNIT - V MODERN WAREHOUSING METHODS 9

Modern Warehousing – Automated Storage & Retrieval Systems & their Operations – Bar Coding Technology & Applications in Logistics Industry – RFID Technology & Applications – Advantages of RFID

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

At the end of the course, the students will be able to get complete insight in to warehouse concepts, various inventory control techniques and application of inventory management in supply chain.

TEXT BOOKS:

1. Vinod.V.Sople, Logistics Management, Pearson Education, 2004.
2. Arnold, Introduction Materials Management, Pearson Education, 2009.

REFERENCES:

1. Frazelle, World Class Warehousing & Material Handling, Tata McGraw-Hill, 2008
2. Satish K. Kapoor and PurvaKansal, Basics of Distribution Management - A Logistical Approach, Prentice Hall, 2003
3. Satish K. Kapoor and PurvaKansal Marketing, Logistics - A Supply Chain Approach , Pearson Education, 2003

OBJECTIVES:

- To explore the fundamental concepts of transportation and distribution management
- To gain knowledge in network planning, routing and scheduling and application of IT in transportation and distribution management.

UNIT - I DISTRIBUTION**9**

Role of Distribution in Supply chain, Distribution channels – Functions, resources, Operations in Distribution, Designing Distribution network models - its features - advantages and disadvantages.

UNIT - II PLANNING**9**

Distribution network planning, Distribution network decisions, Distribution requirement planning (DRP)

UNIT - III TRANSPORTATION**9**

Role of Transportation in Logistics and Business, Principle and Participants-Scope and relationship with other business functions, Modes of Transportation - Mode and Carrier selection, Routing and scheduling.

UNIT - IV TRANSPORTATION**9**

International transportation, Carrier, Freight and Fleet management, Transportation management systems-Administration, Rate negotiation, Trends in Transportation.

UNIT - V INFORMATION TECHNOLOGY (IT)**9**

Usage of IT applications -E commerce – ITMS, Communication systems-Automatic vehicle location systems, Geographic information Systems.

TOTAL: 45 PERIODS

COURSE OUTCOMES: The students will be able to:

- Gain knowledge about the distribution requirements planning.
- Predict the scope and relationship of transportation with other business functions
- Make use of the advantages and disadvantages of the various models.

TEXT BOOKS:

1. Raghuram and N. Rangaraj, Logistics and Supply chain Management – Leveraging Mathematical and Analytical Models: Cases and Concepts, New Delhi: Macmillan, 2000.
2. Janat Shah, Supply Chain Management, Pearson Education India, 2009.

REFERENCES:

1. Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 2010.
2. Michael B Stroh, Practical Guide to Transportation and Logistics, Logistics Network, 2006.
3. Alan Rushton, John Oxley, Handbook of Logistics & Distribution Management, Kogan Page Publishers, 2000.

COURSE OBJECTIVES:

- To prepare students successfully implement a contract logistics and closed supply chain in Retail, FMCG and Automobile sectors.
- To explain the concept and principle of contract logistics and closed supply chain

UNIT - I CONTRACT LOGISTICS**9**

Third party logistics industry overview - A framework for strategic alliances - Evolution of contract logistics - Types of third party logistics providers – Automobile, FMCG and Retail-Third party services and integration

UNIT - II CLOSED LOOP SUPPLY CHAINS AND LOGISTICS**9**

Introduction closed loop supply chains and logistics – Logistics and closed loop supply chain service - Overview of return logistics and closed loop supply chain models – Introduction product returns - Product Vs Parts returns - Strategic issues in closed loop supply chains

UNIT - III BUSINESS AND MARKET**9**

Overview - Introduction life cycle management - Trends and opportunities – Auto Warranty management, return process and benchmarks - Market overview - Reasons for using reverse logistics - General characteristics - Consumer goods Depot repair and value added services - Operating dynamics - Competitive evaluation - Secondary markets and final disposal.

UNIT - IV EMERGING TRENDS**9**

Emerging trends in Retail, E-Commerce- FMCG and Automobile sectors- Systems and technology - For consumer goods operations, High tech logistics system - Impact and value of advanced logistics

UNIT - V MANAGING PROCESSES**9**

Managing processes - Step by step process - Use of third party service providers - Additional factors – Contemporary issues – Make in India and its impact on Countries GDP and Economic Growth.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

The students will be able to understand the basics of contract logistics, third party logistics industry and third party logistics providers. And it helps to gain knowledge about Make in India concept and its impact on the GDP growth

TEXT BOOKS:

1. Janat Shah, Supply Chain Management: Text and Cases, Pearson Education India, 2009
2. John Manners-Bell, Logistics and Supply Chains in Emerging Markets, Kogan Page, 2014.

REFERENCES:

1. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011
2. D. F. Blumberg, Reverse Logistics & Closed Loop Supply Chain Processes, Taylor and Francis, 2005
3. Hsin-I Hsiao, Wageningen, Logistics Outsourcing in the Food Processing Industry, Academic Pub, 2009.
4. Surendra M. Gupta, Sustainability in Supply Chain Management Casebook: Applications in SCM, McGraw Hill, 2013

COURSE OBJECTIVES:

- To provide the participants with a good knowledge of airfreight operations, services and management that can support them in various business functions and roles such as operations, customer service, account management and sales.
- To create awareness about the Air Cargo management.
- To provide general information or a framework on the setup of air cargo processes, for business.

UNIT - I AIR PORTS AND SHIPMENT

9

Ground Handling Agencies - Air Craft - Advantage of Air shipment - Economics of Air Shipment - Sensitive Cargo by Air shipment - Do's and Don'ts in Air Cargo Business

UNIT - II AIR CARGO

9

Air Cargo Console - Freight of Air Cargo - Volume based Calculation of Freight - Weight based Calculation of Freight - Import Documentation - Export Documentation

UNIT- III AIRWAY BILLS

9

Airway Bills - FIATA - IATA - History of IATA - Mission of IATA - Price setting by IATA -Licensing of Agencies - Sub Leasing of Agencies - freight carriers by scheduled freight tonne kilometers flown

UNIT - IV CARGO VILLAGE

9

History of Dubai Cargo Village - Location of DCV - Equipment and Handling at DCV - Operations - Advantage of Sea Air Cargo - Why Sea Air Cargo is Cheaper - Why Air freight from Dubai is Cheaper?

UNIT - V DG CARGO

9

DG Cargo by Air - Classification and labelling - Types of Labels according Cargo – Samples of Labels
- Packing and Transportation of DG Goods by Air

TOTAL: 45 PERIODS

COURSE OUTCOMES:

The outcome of this course will provide the basics concepts of airports and aircrafts and various participants in air cargo transportation. Students will come to know about roles of the customs and the government in air transport.

TEXT BOOKS:

1. Yoon SeokChang, Air Cargo Management, CRC Press, 2015.
2. Xie Chun Xun Zhu, Air Cargo Management Introduction - Aviation Logistics, Management Series (Chinese Edition), Southeast University Press, 2006.
3. Hampton Simon Taylor, Air transport logistics, CRC Press, 2000.

REFERENCES:

1. Paul, Air cargo distributions: a management analysis of its economic and marketing benefits, Jackson and William Brackenridge (Gower Press), 1988.
2. Peter S. Smith, Air freight: operations, marketing and economics, Chu (Boston : Kluwer Academic Publishers), 2004.
3. John Walter wood, Airports; some elements of designs and future development, Chu(Boston : Kluwer Academic Publishers), 1981.

COURSE OBJECTIVES:

- To provide an overview of the various elements of containerization and allied businesses
- To realize the potential of containerization and allied businesses

UNIT –I BASIC CONCEPT OF CONTAINERIZATION 9

Introduction to Liner Shipping industry - Unitization concept and methods - Malcolm Mclean and the birth of containerization - Generations of container ships and their specification - Container types, their specifications and cargoes carried in them.

UNIT –II FREIGHTING AND SIZE OF CONTAINER 9

Container shipping business - FCL and LCL sea freight products - Freight of FCL and LCL cargo - Slot utilization strategies - Estimation of optimum container fleet size - Multiport LCL consolidation

UNIT – III CHARACTERISTICS AND PHYSICAL OPERATIONS 9

Containerisation: Concept, Classification, Benefits and Constraints, Container terminal business-World's leading container terminals and location characteristics - container terminal infrastructure - container terminal productivity and profitability-Inland container Depots(ICD)Roles and functions - Container Freight Stations(CFS),Clearance at ICD, CONCOD,ICD's under CONCOD, Charting: Kinds of Charter, Charter Party and Arbitration.

UNIT – IV CONTAINER TYPES AND BUSINESS 9

Container manufacturing trends - Container leasing business - Types of container leasing and their terms - maintenance and repair of containers - tracking of container movements - Container interchange.

UNIT – V MULTIMODAL TRANSPORT 9

Alternate uses of containers -marketing of used containers -carriage of shipper own containers - multimodal transport options for containers -Insurance for containers -strategies for managing container imbalance.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

- The students will learn the practices and ways to promote containerization and allied businesses
- The learners will have a complete idea about the different concepts, trends and strategies used for containerization and allied businesses

REFERENCES:

1. Marc Levinson, The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger, Princeton University Press, 2008.
2. Dr. K. V. Hariharan, Containerisation, Multimodal Transport & Infrastructure Development In India, Sixth Edition, Shroff Publishers and Distributors, 2015.
3. Lee, C.-Y., Meng, Q. (Eds.), Handbook of Ocean Container Transport Logistics Making Global Supply Chains Effective, Springer, 2015
4. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011

COURSE OBJECTIVES:

- To enlighten the students about the major functions in export and import processes.
- To provide the expertise for solving issues related to requirements in EXIM management.

UNIT – I FUNDAMENTALS OF IMPORT AND EXPORT**9**

Role of Import and Export Trade in an Economy - Institutional Framework for Foreign trade in India -Role of Director General of Foreign Trade and Commerce - Objectives of EXIM Policy - Global trade flows - Contract of International Sale of Goods - INCOTERMS 2010

UNIT - II OVERVIEW OF EXPORT AND IMPORT**9**

Marketing for Exports - Negotiation and finalization of Export contract - Export Documentation Procedures - Cargo Insurance - Export Promotion Councils and incentive schemes- Role of Logistics in Exports- Export Houses / Trading Houses

UNIT - III DOCUMENTATION FRAMEWORK**9**

Import for industrial use / trading - Import Documentation and Customs clearance procedures - Types of Imports - Import Licenses - Cargo Insurance - Role of Logistics in Import

UNIT - IV CREDIT AND PAYMENTS**9**

Payment methods in Foreign Trade - Documentary Credit / Letter of Credit–LOU-UCP 600 with respect to Shipping Documents and L/C Negotiation – Export / import financing strategies - Managing payment risks.

UNIT - V CUSTOMS CLEARANCE AND AGENCIES**9**

Roles of Service providers in EXIM transactions – Global Traders – Commodity Brokers - Custom House Agents – Transport Operators – Freight Forwarders – Warehousing and 3PL service providers – Liners /Ship Agencies – Container Freight Stations - Port – Inspection Agencies/ surveyors – Quarantine Agencies – Pest Control Agencies – Chamber of Commerce.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

- The students would be aware about the formalities of export and import industry
- The students will be able to comprehend the importance of exim management.

REFERENCES:

1. Justin Pauland Rajiv Aserkar, Export Import Management, Second Edition, Oxford University Press, 2013.
2. UshaKiranRai, Export - Import and Logistics Management, Second Edition, PHI Learning, 2010.
3. Director General of Foreign Trade, Foreign Trade Policy and Handbook of Procedures, 2015
4. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011

BA4061

FUNDAMENTALS OF SHIPPING

L	T	P	C
3	0	0	3

COURSE OBJECTIVES:

- To provide the knowledge about fundamentals of shipping management
- To equip the students with the knowledge of shipping, ship building and repair

UNIT I INTERDICTION OF SHIPPING 9

Role of Shipping in International trade-Types of ships and cargoes carried by them - International Organizations serving the shipping industry (IMO, BIMCO, ICS, IACS, IAPH)- Ship Registration and Classification.

UNIT II LINER SHIPPING OPERATIONS 9

Liner shipping business - Types of Liner services - Container shipping lines and their services - Break bulk, Ro-Ro and project cargo services - Liner freight rates - Liner cargo documentation - Liner agency functions

UNIT III DRY BULK BUSINESS 9

Dry Bulk shipping business- World's leading dry bulkports and cargoes handled by them - Types of Dry bulk ships and the Dry Bulk industry structure - Dry bulk market indices - Types of Chartering - Port agency functions.

UNIT IV TANKER OPERATIONS AND BUSINESS 9

Liquid Bulk shipping business - World's leading wet bulk ports and cargoes handled by them- Types of tankers and gas carriers - Tanker freighting system (worldscale) -Factors affecting Tanker markets-Marine pollution conventions.

UNIT V SHIP BUILDING AND REPAIR 9

Service providers to shipping industry -Ship management companies -Ports, inland terminals and Container Freight Stations- Ship building and repair yards -Financing the Shipping industry - Marine insurance providers.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

- The students would be acquainted with the basics of shipping management
- The students will learn the skills needed for shipping industry

REFERENCES:

1. Michael Robarts, Branch's Elements of Shipping, Ninth Edition, Routledge, 2014.
2. Peter Brodie, Commercial Shipping Handbook, Third Edition, Informa Law from Routledge, 2014.
3. Review of Maritime Transport, UNCTAD, 2014.
4. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011

BA4062

PORT AND TERMINAL MANAGEMENT

L	T	P	C
3	0	0	3

COURSE OBJECTIVES:

- To enlighten the students about the major functions in the port and terminal management
- To expose the students on the trends in port and terminal management

UNIT – I INTRODUCTION TO PORT AND TERMINAL 9

Role of ports in international trade and transport - Economic impact of ports on the regional economy - Multiplier effect - Location characteristics of ports - Different types of ports (natural, manmade, river, estuary).

UNIT – II PORT OPERATIONS 9

Design features of facilities in ports for handling various cargoes - Organization structure in Ports -Delivery of port services and the relationship between various departments - Marine Department –Traffic Department – other departments.

UNIT – III PORT MARKETING AND SERVICES 9

Marketing of Port services - Pricing of Port services - Components of port tariff - Concept of hinterland – Identifying the needs of ship owners and operators, ship agents, forwarders, truckers, rail and barge operators - Concept of Total Logistics cost.

UNIT – IV PORT PERFORMANCE 9

Measurement of port performance - vessel turn round time, cargo volume, speed of cargo handling
- Information flow requirements of the port, statutory bodies and port users - Port community computer systems and EDI applications.

UNIT – V PORT SECURITY AND ISSUES 9

Environmental issues connected with Ports & Terminals - Health and safety issues - Port security issues - International Ships and Port facility security (ISPS) code - Role of national, regional and local governments in owning / operating / managing ports.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

- The students would be aware about skills pertaining to port and terminal management
- The students should be able to understand the principles and applications for port and terminal management

REFERENCES:

1. Maria G. Burns, Port Management and Operations, CRC Press, 2014.
2. Patrick Alderton, Port Management and Operations, Third Edition, Lloyd's Practical Shipping Guides, 2008
3. H. Ligteringen, H. Velsink, Ports and Terminals, VSSD Publishers, 2012.
4. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011

SECTORAL SPECIALISATION IN
INFRASTRUCTURE AND REAL ESTATE MANAGEMENT

BA4063 INFRASTRUCTURE PLANNING, SCHEDULING AND CONTROL **L T P C**
3 0 0 3

COURSE OBJECTIVE:

- To give an exposure to the students on the concept and the principles of planning, scheduling and control about infrastructure industry.

UNIT I INTRODUCTION 9

Introduction to infrastructure - Need and importance of infrastructure in India - Overview of power sector - Overview of water supply and sanitation sector-Overview of road, rail, air and port transportation sectors-Overview of telecommunication sector-Overview of rural and urban infrastructure-Introduction to special economic zones-Organizations and players in infrastructure field -Overview of infrastructure project finance.

UNIT II INFRASTRUCTURE PRIVATIZATION 9

Privatization of infrastructure in India - Benefits of privatization-Problems with privatization-Challenges in privatization of water supply projects- Challenges in privatization of power sector projects – Challenges in privatization of road transportation projects.

UNIT III RISKS IN INFRASTRUCTURE PROJECTS 9

Economic and demand risks, political risks, socio-economic risks and cultural risks in infrastructure projects -Legal and contractual issues in infrastructure projects- Challenges in construction of infrastructure projects.

UNIT IV RISK MANAGEMENT FRAMEWORK 9

Planning to mitigate risk-Designing sustainable contracts-Introduction to fair process and negotiation-Negotiation with multiple stakeholders - Sustainable development- Information technology and systems for successful management.

UNIT V DESIGN & MAINTENANCE OF INFRASTRUCTURE 9

Innovative design and maintenance of infrastructure facilities- Modeling and life cycle analysis techniques-Capacity building and improving Government's role in implementation-Integrated framework for successful planning and management.

TOTAL :45 PERIODS

COURSE OUTCOMES

On successful completion of the course, students will be able to

- Explain the basic concepts related to infrastructure and understand management.
- Explain the benefits and problems with infrastructure
- Identify the challenges and strategies for successful planning and implementation of infrastructure.
- Apply the above concepts to various infrastructure domains.

REFERENCES

- Raina V.K, "Construction Management Practice – The inside Story", Tata McGraw Hill Publishing Limited, 2005
- Leslie Feigenbaum, "Construction Scheduling With Primavera Project Planner", Prentice Hall, 2002
- W.Ronald Hudson, Ralph Haas, Waheed Uddin, "Infrastructure Management: Integrating, Design, Construction, Maintenance, Rehabilitation and renovation", McGraw Hill Publisher, 2013
- Prasanna Chandra, "Projects – Planning, Analysis, Selection, Implementation Review", Tata McGraw Hill Publishing Company Ltd., New Delhi. 2006.

5. Joy P.K., "Total Project Management - The Indian Context", Macmillan India Ltd., 1992
6. Report on Indian Urban Infrastructure and Services – The High Powered Expert Committee for estimating the Investment Requirements for Urban Infrastructure Services, March 2011
7. Urban Water Development in India 2011 – Published and Distributed by India Infrastructure Research
8. Manual on sewerage and sewage treatment, CPHEEO, Ministry of urban affairs and employment, Govt. of India, New Delhi, 2012
9. Manual of National Highway Authority of India, 1988

BA4064**CONTRACTS AND ARBITRATION****L T P C****3 0 0 3****COURSE OBJECTIVE:**

- To create awareness on contracts for construction industry, impart knowledge on tender preparation, tendering process, laws on arbitration, arbitration procedure and laws on dispute resolution in India.

UNIT I INTRODUCTION TO CONTRACTS IN CONSTRUCTION INDUSTRY 9

Brief details of engineering contracts -Definition, types and essentials of contracts and clauses for contracts - Preparation of tender documents and contract documents - Issues related to tendering process- Awarding contract, e-tendering process - Time of performance - Provisions of contract law - Breach of contract - Performance of contracts - Discharge of a contract- Indian contract Act 1872 - Extracts and variations in engineering contracts - Risk management in contracts.

UNIT II LAWS RELATED TO CONSTRUCTION INDUSTRY 9

Labor and industrial laws - Payment of wages act, contract labor - Workmen's compensation act - Insurance, industrial dispute act- Role of RERA

UNIT III ARBITRATION OF ENGINEERING CONTRACTS 9

Background of Arbitration in India - Indian Arbitration Act 1937 - UNCITRAL model law - Forms of arbitration - Arbitration agreement - Commencement of arbitral proceedings - Constitution of arbitral tribunal - Institutional procedure of arbitration -Impartiality and independence of arbitrators jurisdiction of arbitral tribunal - Interim measures - Enforcement of awards.

UNIT IV NEGOTIATION, MEDIATION AND CONCILIATION 9

Concepts and purpose - Statutory back ground ADR and mediation rules - Duty of mediator and disclose facts - Power of court in mediation.

UNIT V ALTERNATE DISPUTE RESOLUTION 9

Structure of Indian Judicial - The arbitration and reconciliation ordinance 1996 -Dispute resolution mechanism under the Indian judicial system - Litigation in Indian courts - Case studies.

TOTAL :45 PERIODS**COURSE OUTCOMES:**

On successful completion of the course, students will be able to

- understand the laws on contracts for construction industry in india
- apply knowledge of contracts in preparation of contract document and tendering process
- apply appropriate methods to assess the critical factors in contracts leading to arbitration and disputes between the parties
- suggest suitable type of arbitration or dispute resolution for the situation of problem

REFERENCES

1. American Arbitration Association, "Construction industry arbitration rules and mediation procedures", 2007
2. Case study of Southern Railway Arbitration Cases wiki.ircen.gov.in/doku/lib/exe/fetch.php
3. Collex.K, "Managing Construction Contracts", Reston publishing company, Virginia, 1982
4. Eastern Book Company "Arbitration and Conciliation Act 1996", June 2008
5. International Federation of Consulting Engineers (FIDIC) documents, Geneva, 2009 (<http://www.fidic.org>)
6. Gajaria. G.T., "Laws relating to building and Engineer's Contracts", M.M. Tripathi Pvt Ltd., Mumbai, 1985
7. Horgon.M.O and Roulstion F.R., "Project Control of Engineering Contracts" E and FN, SPON, Norway, 1988
8. Krishna Sharma, Momota Oinam and Angshuman Kaushik, "Development and Practice of Arbitration in India- Has it evolved as an effective legal Institution", CDDRL, Stanford, 103, Oct 2009
9. Park.W.B., "Construction Bidding for Projects", John Wiley, Norway, 1978
10. Roshan Namavati, "Professional Practice", Anuphai Publications, Lakhani Book Depot, 2013
11. Vasavada.B.J. "Engineering Contracts and Arbitration", March 1996

BA4065 PROJECT MANAGEMENT FOR INFRASTRUCTURE

L T P C
3 0 0 3

COURSE OBJECTIVE:

- To impart projects types, time & resource management, resource optimization and new trends in project management.

UNIT I PROJECT AND ITS PROCESS

Define project and process -Boundaries of project - Objectives and functions of project management -Characteristics and types of projects -Organization structure / styles -Roles of project management group - Project management office and its role - Project knowledge area - Project integration- Process group interaction -project flow - Project life cycle-Influencing factors. - Case study.

UNIT II PROJECT TIME MANAGEMENT

Project scope management - Work break down structure - Activity/Task – Events - Case study - Project planning tools - Rolling wave planning - Gantt charts, Milestone chart, Program progress chart- Creating milestone plan - Project network- Fulkerson's rules - A-O-A and A-O-N networks - Analyze project time- Critical path method (deterministic approach) - Activity oriented network analysis- 80-20 rule- Case study - Type of time estimates & square network diagram - Project updating and monitoring- Case study - Estimate time- Program Evaluation & Review Technique (Probabilistic approach)- Event oriented network analysis- Optimistic, pessimistic and most likely time - Degree of variability in average time - Probabilistic estimate - % utilization of resources.

UNIT III RESOURCE MANAGEMENT

Types of Resource- Time, Men, Material, Machinery, Money, Space - Balancing of resource - Resource smoothing technique- Time constraint - Resource leveling technique- Resource constraint- Case study.

UNIT IV RESOURCE OPTIMIZATION

Types of cost – Direct, indirect and total cost - Variation of cost with time - Schedule compression techniques- Crashing, fast tracking & Re-estimation- Crash time and crash cost - Optimize project cost for time and resource - CPM cost model - Life cycle assessment - Impacts and economical assessment - Life cycle cost- Maintenance and operation -Life cycle forecasting – Concept and applications.

UNIT V EMERGING TRENDS IN PROJECT MANAGEMENT

AGILE Project management and Project Management using latest tools- Case study.

TOTAL : 45 PERIODS**COURSE OUTCOMES:**

On successful completion of the course, the students will be able to

- Explain the concept of projects, its process, objectives and functions of project management
- Analyze and manage time in projects through gantt charts, cpm and pert techniques
- Balance resource requirements of projects so as to avoid idling of resources
- Update projects and determine revised schedule of activities and critical path, if any
- Crash projects to determine its optimum time-minimum cost relationships

REFERENCES

1. "A Guide to the Project Management Body of Knowledge (PMBOK Guide) – Fourth Edition, An American National Standard, ANSI/PMI 990001-2008"
2. A Risk Management Standard, AIRMIC Publishers, ALARM, IRM: 2002
3. Gene Dixon, "Service Learning and Integrated Collaborative Project Management", Project Management Journal, DOI:10.1002/pmi, February 2011, pp.42-58
4. Jerome D. Wiest and Ferdinand K. Levy, "A Management Guide to PERT/CPM", Prentice Hall of India Publishers Ltd., New Delhi, 1994.
5. Punmia B. C. and Khandelwal K.K., "Project Planning and Control with PERT/CPM", Laxmi publications, New Delhi, 1989.
6. Srinath L.S., "PERT & CPM- Principles and Applications", Affiliated East West Press Pvt., Ltd., New Delhi, 2008
7. Sengupta. B and Guha. H, "Construction Management and Planning", Tata McGraw Hill, New Delhi, 1995
8. SangaReddi. S and Meiyappan. PL, "Construction Management", Kumaran Publications, Coimbatore, 1999

BA4066 MANAGEMENT OF HUMAN RESOURCES, SAFETY AND QUALITY **L T P C**
3 0 0 3

COURSE OBJECTIVE:

- to impart knowledge on management of human resources, labor legislation, safety and quality aspects in construction

UNIT I HUMAN RESOURCES MANAGEMENT 9

Introduction - Concept- Growth - Role and function - Manpower planning for construction companies - Line and staff function - Recruitment, selection, placement, induction and training; over staffing; Time office and establishment functions; wage and salary administration - Discipline - Separation process.

UNIT II LABOR LEGISLATION 9

Labor laws- Labor law relating to construction industry- Interstate migration- Industrial relations- Collective bargaining- Worker's participation in management - Grievance handling - Discipline - Role of law enforcing agencies and judiciary -Women in construction industry.

UNIT III SAFETY MANAGEMENT 9

Importance of safety- Causes of accidents -Responsibility for safety - Role of various parties in safety management -Safety benefits- Approaches to improve safety in construction for different works - Measuring safety.

UNIT IV SAFETY IMPLEMENTATION 9

Application of ergonomics to the construction industry - Prevention of fires at construction site- Safety audit.

UNIT V QUALITY MANAGEMENT IN CONSTRUCTION**9**

Importance of quality - Elements of quality - Quality characteristics- Quality by design - Quality conformance -Contractor quality control - Identification and traceability - Continuous chain management - Brief concept and application - Importance of specifications- Incentives and penalties in specifications - Workmanship as a mark of quality - Final inspection - Quality assurance techniques - Inspection, testing, sampling - Documentation - Organization for quality control, Cost of quality - Introduction to TQM, Six sigma concept- ISO 14000 in quality management.

TOTAL :45 PERIODS**COURSE OUTCOMES:**

On successful completion of the course, students will be able to

- Identify the need and importance of human resource management, labour laws relating to construction industry
- Identify the need and measures to improve safety in construction industry and safety audit
- Identify the need for applying ergonomics to construction industry
- Enumerate the need, importance, elements of quality and significance of quality assurance in industry

REFERENCES

1. Arya Ashok, "Human Resources Management – Human Dimensions in Management" March 24-26, 2011, Organizational Development Programme Division – New Delhi
2. Arya Ashok, "Essence of Labour Laws"- www.odiindia.in/about-the-books.pdf
3. Arya Ashok "Discipline & Disciplinary procedure" Organisation Development Institute, 1998
4. Arya Ashok, "Management case studies – An analytical and Developmental Tool" Organisation Development Institute, New Delhi, 1999
5. Corlecon Coulter, Jill Justice Coulter, The Complete Standard Hand Book of Construction Management", Prentice Hall, (1989)
6. Dwivedi R.S., "Human Relations and Organisational Behaviour", (BH – 1987)
7. Grant E.L., and Leavens worth, "Statistical Quality Control", Mc Graw Hill, 1984.
8. James J Obrien, "Construction Inspection Hand Book – Quality Assurance and Quality Control", Van Nostrand, New York, 1989
9. Josy J. Farrilaro, "Hand Book of Human Resources Administration" Mc.Graw Hill(International Edition) 1987.
10. Juran Frank, J.M. and Gryna F.M. "Quality Planning and Analysis", Tata Mc Graw Hill, 1982.
11. Malik, P.L., "Handbook of Labour & Industrial Law", Eastern book company, Lalbagh, Lucknow, 2010
12. Manoria C.B., "Personnel Management", Himalaya Publishing House, 1992.

COURSE OBJECTIVES:

- To create an awareness on the various types of disasters and to expose the students about the measures, its effect against built structures, and hazard assessment procedure in India.
- To impart knowledge on the methods of mitigating various hazards such that their impact on communities is reduced.

UNIT I INTRODUCTION**9**

Difference between hazards and disaster -Types of disasters-Phases of disaster management -Hazards - Classification of hazards - Hazards affecting buildings - Building safety against hazards - Floods - Cyclone - Landslides -Tsunami - Fire.

UNIT II EARTHQUAKE DISASTER**9**

Earthquake hazard map -Causes of earthquakes -Classification of earthquakes -Seismic waves -Energy release - Inertia forces - Natural period - Resonance - Damping -Seismic response of free vibration -Seismic response of damped vibration -Performance of ground and buildings in past earthquakes-Earthquake resistant measures in RC and masonry buildings - Potential deficiencies of RC and masonry buildings.

UNIT III OTHER DISASTERS**9**

Landslides-Landslide zoning map - Causes -Protection measures Floods -Flood zone map - Effects on buildings -Protection measures from damage to buildings -Mitigation strategies - Tropical cyclones - Effects on buildings -Protection measures from damage to buildings - Tsunami -Tsunami wave characteristics -Peculiarities of tsunami deposits -Tsunami impact on coastal lines-Effects of Tsunami on built structures - Fire disaster - Causes and effects of fire disaster - Preventive mechanism .

UNIT IV HAZARD ASSESSMENT**9**

Visual inspection and study of available documents -Detailed in-situ investigation planning and interpretation of results-Foundation capability -Non-structural components - Seismic strengthening of buildings -Repairs, restoration and strengthening of existing buildings - Strengthening materials -Retrofitting of load bearing wall buildings - Retrofitting of RC Buildings-RVS method of screening - RC and masonry structures -Seismic hazard assessment - Deterministic seismic hazard analysis - PSHA.

UNIT V LAND USE ZONING REGULATIONS, QUALITY CONTROL AND DISASTER MANAGEMENT POLICY**9**

Introduction-Community planning - Community contingency plan - Report building and initial awareness - Recommendations for land use zoning regulations - Construction quality control -Evolution of quality management -Reasons for poor construction -Construction of quality control in masonry structures - Disaster management policy and procedure -Legal frame work - Institutional mechanism - Schemes and grants on DM - Recommendation of 13th finance commission -Plan schemes - Non plan schemes - Externally aided schemes Role of NDRF in Disaster Management - Medical First Responder - Flood Rescue &Relief Management.

TOTAL :45 PERIODS**COURSE OUTCOMES:**

On successful completion of the course, students will be able to

- Understand the various types of disaster viz hydrological, coastal and marine disasters, atmospheric disasters, geological, mass movement and land disasters, wind and water driven disasters.
- To identify the potential deficiencies of existing buildings for eq disaster and suggest suitable remedial measures.
- Derive the guide lines for the precautionary measures and rehabilitation measures for eq disaster.

- ## REFERENCES

- | | | | | |
|---|---|---|---|---|
| BA4068 ECONOMICS AND FINANCIAL MANAGEMENT IN CONSTRUCTION | L | T | P | C |
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- To study the concepts of construction economics and finance such as comparing alternatives proposals, evaluating alternative investments, management of funds, Insurance procedures, risks involved and economics of costing.

9

UNIT II MARKET STRUCTURE AND CONSTRUCTION ECONOMICS

9

UNIT III EVALUATING ALTERNATIVE INVESTMENTS

9

UNIT IV FUNDS MANAGEMENT

9

Project Finance - Sources - Working capital management- Inventory Management- Mortgage Financing-- Interim construction financing - Security and risk aspects

UNIT V ECONOMICS OF COSTING**9**

Construction accounting-Chart of accounts- Meaning and definition of costing - Types of costing - Methods of calculation (Marginal costing, cost sheet, budget preparation) – Equipment Cost-Replacement Analysis - Role of costing technique in real estate and infrastructure management.

TOTAL: 45 PERIODS**COURSE OUTCOME:**

- On completion of this course the students will be able to know the concepts in Economics and Finance in Construction.

REFERENCES

- Pandey, I.M, Financial Management, 12th Edition Vikas Publishing House Pvt. Ltd., 2012.
- Prasanna Chandra, Financial Management, 9th edition, Tata McGraw Hill, 2012.
- Paul A. Samuelson, William D. Nordhaus, Sudip Chaudhuri and Anindya Sen, Economics, 19th edition, Tata McGraw Hill, 2010.
- Blank, L.T., and Tarquin, a.J , Engineering Economy, 4th Edn. Mc-Graw Hill, 1988.
- Patel, B M, Project management- strategic Financial Planning, Evaluation and Control, Vikas Publishing House Pvt. Ltd. New Delhi, 2000.
- Shrivastava, U.K., Construction Planning and Management, 2nd Edn. Galgotia Publications Pvt. Ltd. New Delhi, 2000.
- Steiner, H.M., Engineering Economic principles, 2nd Edn. Mc-Graw Hill Book, New York, 1996.

BA4069**URBAN ENVIRONMENT MANAGEMENT**

L	T	P	C
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COURSE OBJECTIVES:

- To create an awareness on the various environmental issues in an urban scenario and give an exposure to the urban water resources and its management.
- To impart knowledge on the stages of works involved in a water supply project of a city, safe wastewater collection system for generated wastewater and its management, solid waste and their safe disposal beyond urban limit to be free from pollution is also addressed in the course work.

UNIT I URBAN ENVIRONMENTAL ISSUES**9**

Urbanization- Population growth scenario -Migration - Pollution of surface water resources - Rivers, tanks, channels -Ground water exploitation - Waste water -Characteristics -Pollution problems - Solid waste -Air pollution - CPCB norms.

UNIT II URBAN MASTER PLANS**9**

Planning and organizational aspects -Urban waste resources management - Water in urban ecosystem -Urban water resources planning and organization aspects -Storm water management practices -Types of storage -Magnitude of storage -Storage capacity of urban components - Percolation ponds -Temple tanks -Rainwater harvesting -Urban water supply - Demand estimation - Population forecasting -Source identification -Water conveyance -Storage reservoirs -Fixing storage capacity - Distribution network -Types -Analysis -Computer applications - Conservation techniques - Integrated urban water planning - Smart city project planning - Green Building - LEED certification - Green audit

UNIT III URBAN WASTEWATER MANAGEMENT**9**

Sewage generation -Storm drainage estimation -Industry contribution -Wastewater collection system -Separate and combined system -Hydraulic design of sewer and storm drain -Wastewater treatment -Disposal methods -Concept of decentralization - 3R concepts.

UNIT IV MUNICIPAL SOLID WASTE MANAGEMENT**9**

Sources of solid waste -Characteristics -Rate of generation -Segregation at source -Collection of solid waste -Methods of collection -Route analysis -Transfer and transfer stations -Processing and disposal of solid waste.

UNIT V CASE STUDIES**9**

Environmental economics- Social and physiological aspects of pollution - Successful urban management -Models- Urban management-Case studies from developed nations -Software.

TOTAL :45 PERIODS**COURSE OUTCOMES:**

On successful completion of the course, students will be able to

- understand planning of a city and identify various urban environmental issues
- apply and prepare project plans to integrate urban water resource
- develop water resource management using available water resources
- understand and apply the principles of solid waste management

REFERENCES

1. George Tchobanoglous, Hilary Theisen and Samuel A. Vigil "Integrated Solid Waste Management", McGraw Hill Publishers, New York, 1993.
2. McGhee J., "Water supply and sewerage", McGraw Hill Publishers, 1991
3. Martin P. Wanelista and Yousef. "Storm Water Management and Operations", John Wiley and Sons, 1993.
4. Neil S. Grigg., "Urban Water Infrastructure Planning – Management and Operations", John Wiley and Sons, 1986.

**BA4070 SMART MATERIALS, TECHNIQUES AND EQUIPMENTS
FOR INFRASTRUCTURE**
L T P C
3 0 0 3
COURSE OBJECTIVE:

- To give an exposure on the advanced materials, techniques and equipments used in infrastructure industry.

UNIT I SPECIAL CONCRETES**9**

Concrete -Behavior of concrete - High strength and high performance concrete - Fibre reinforced concrete - Self compacting concrete - Bacterial concrete -Reactive powder concrete - Ready mix concrete -Geopolymer concrete -Alternative materials for concrete.

UNIT II METALS**9**

Steels - New alloy steels - Coatings to reinforcement - Cold formed steel -Aluminum and its products -Applications. Composites: Plastics - Reinforced polymers- FRP -Applications. Smart and intelligent materials: smart and intelligent materials for intelligent buildings - Special features.

UNIT III ADVANCED CONSTRUCTION TECHNIQUES**9**

Sub structure construction: Box jacking- Pipe jacking- Under water construction of diaphragm walls and basement- Tunneling techniques-Cable anchoring and grouting- Driving diaphragm walls, sheet piles, laying operations for built up offshore system- Shoring for deep cutting- Large reservoir construction -Trenchless technology.

UNIT IV SUPERSTRUCTURE CONSTRUCTION FOR BUILDINGS**9**

Vacuum dewatering of concrete flooring- Concrete paving technology- Techniques of construction for continuous concreting operation in tall buildings of various shapes and varying sections -Launching techniques suspended form work -Erection techniques of tall structures, large span structures- Launching techniques for heavy decks -Inset pre-stressing in high rise structures, aerial transporting, handling, erecting lightweight components on tall structures.

UNIT V CONSTRUCTION OF SPECIAL STRUCTURES**9**

Erection of lattice towers and rigging of transmission line structures- Construction sequence in cooling towers, silos, chimney, sky scrapers, bow string bridges, cable stayed bridges - Launching and pushing of box decks -Advanced construction techniques of offshore structures- Construction sequence and methods in domes and prestress domes -Support structure for heavy equipment and conveyor and machinery in heavy industries -Erection of articulated structures, braced domes and space decks. Demolition Techniques -Advanced techniques and sequence in demolition and dismantling.

TOTAL :45 PERIODS**COURSE OUTCOMES:**

On successful completion of the course, students will be able to

- explain the properties and applications of special concretes, composites, smart and intelligent materials
- identify and explain advanced construction techniques used for sub structure construction
- select appropriate techniques for super structure construction of buildings
- select suitable techniques for construction of special structures
- choose relevant technique for demolition and dismantling works

REFERENCES

1. Jerry Irvine, "Advanced Construction Techniques", C.A. Rocketr, 1984
2. Patrick Powers, "Construction Dewatering: New Methods and Applications", John Wiley & Sons, 1992
3. Robertwade Brown, "Practical foundation Engineering handbook", McGraw Hill Publications, 1995.
4. Sankar S.K. and Saraswathi. S, "Construction Technology", Oxford University Press, New Delhi, 2008.

BA4071 STRATEGIC AIRPORT INFRASTRUCTURE MANAGEMENT

L	T	P	C
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COURSE OBJECTIVE:

- To provide the participants with a good knowledge on strategic planning and marketing in airport organizations.

UNIT I INTRODUCTION TO AIRPORT INFRASTRUCTURE**9**

Growth of air transport, Airport organization and associations, Classification of airports airfield components, Air traffic zones and approach areas. Context of airport system planning - Development of airport planning process - Ultimate consumers - Airline decision - Other airport operations.

UNIT II AIRPORT INFRASTRUCTURE CAPACITY DESIGN**9**

Components, size, turning radius, speed, airport characteristics. Capacity and Delay - Factors affecting capacity, determination of runway capacity related to delay, gate capacity and taxiway capacity.

UNIT III AIRPORT INFRASTRUCTURE PLANNING AND SURVEYS**9**

Runway length and width, sight distances, longitudinal and transverse, runway intersections, taxiways, clearances, aprons, numbering, holding apron. Planning and design of the terminal area: Operational concepts, space relationships and area requirements, noise control, vehicular traffic and parking at airports. Air traffic control and aids: Runways and taxiways markings, day and night landing aids, airport lighting and other associated aids.

UNIT IV AIRPORT INFRASTRUCTURE ENTERPRISE 9

The economic impact on countries and regions - the main governance patterns in the airport business - The International path of evolution in the airport business - Airport transport value chain - Air enterprises - two primary actors in the air transport value chain - Skipping peripheral positions in the value chain. Rise of airport marketing for the aviation related business - Airport revenue management- Airport alliances- management contract.

UNIT V THE DEVELOPMENT OF THE NON AVIATION INFRASTRUCTURE 9

Related value Proposition. Evolution of traditional Airport - Evolutionary patterns for airport enterprises- Commercial Airport Philosophy - tourist and conference service - logistic services- property management- consulting services - BAA and the non aviation business - best airport in the world: The case of Singapore Airport - Role and meaning of loyalty for a service company- Bench marking airline experience - Provider - Customer relational link - benefits from ALPS implementation of ALPS.

TOTAL :45 PERIODS

COURSE OUTCOMES:

On the successful completion of the course, students will be able to:

- Explain the classification of airports airfield components
- Explain the main governance patterns in the airport business
- Identify the evolutionary patterns for airport enterprises.
- Explain the primary actors in the air transport value chain

REFERENCES

1. Aviation Safety Programs A Management Hand Book: Richard H. Wood - Jeppesen Sanderson Inc.
2. Airport Systems,: Planning, Design and Management, Second Edition, Richard L. De Neufville , Amedeo R. Odoni, Peter Belobaba,& Tom G. Reynolds), 2013.
3. Airport Planning and Management, Sixth Edition, Seth B. Young, Ph.D., Alexander T. Wells, Ed.D., McGraw-Hill Education, 2011.
4. Asset and Infrastructure Management for Airports—Primer and Guidebook, The national academic press.

BA4072 REAL ESTATE MARKETING AND MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVE:

- To provide the participants with a good knowledge on real estate marketing and management.

UNIT I CONCEPT 9

Fundamental concepts and techniques involved in real estate development process- Role of various organizations - CREDAI- BAI etc

UNIT II EVENTS AND PRE-PROJECT STUDIES 9

Modeling sequential events in real estate development process - Site evaluation - Land procurement - Development Team assembly - Market study

UNIT III DEVELOPMENT PLANNING & APPROVAL PROCESS 9

Identifying technical inputs required, planning objectives, front end clearances from various authorities, timing of the project and scheduling

UNIT IV CONSTRUCTION AND PROJECT MANAGEMENT 9

Identifying the elements of infrastructure and the resource mobilization, disaggregating the project components, mobilizing the human and fiscal resources procuring and storing materials

UNIT V PROJECT MARKETING & HANDING OVER**9**

Over of the completed project- Communication tools required for presenting the project -In house sales promotion -Franchisee system -Joint venture and sharing issues - Procedure and laws relating to transfer of completed project.

TOTAL :45 PERIODS**COURSE OUTCOMES:**

On successful completion of the course, students will be able to

- Explain the fundamental concepts and techniques involved in real estate development process
- Explain the procedure and laws relating to transfer of completed project
- Identify the fiscal resources procuring and storing materials process.

REFERENCES:

1. Gerald R. Cortesi, "Mastering real estate principles" (2001); Dearborn Trade Publishing, New York, USA.
2. Fillmore W Galaty, "Modern real estate practice" (2002); Dearborn Trade publishing, New York, USA
3. Tanya Davis, "Real estate developer's handbook" (2007), Atlantic pub company, Ocala, USA.
4. Mike E. Miles, "Real estate development - Principles & process 3rd edition" (2000); Urban Land Institute, ULI, Washington DC.

BA4073 INFRASTRUCTURE AND REAL ESTATE ENTREPRENEURSHIP

L	T	P	C
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COURSE OBJECTIVES:

- To develop and strengthen entrepreneurial quality and motivation in students.
- To impart basic entrepreneurial skills and understandings to run a business efficiently and effectively.

UNIT I ENTREPRENEURIAL COMPETENCE**9**

Entrepreneurship concept - Entrepreneurship as a Career - Entrepreneurial Personality - Characteristics of Successful, Entrepreneur - Knowledge and Skills of Entrepreneur.

UNIT II ENTREPRENEURIAL ENVIRONMENT**9**

Business Environment - Role of Family and Society - Entrepreneurship Development Training and Other Support Organizational Services - Central and State Government Industrial Policies and Regulations - International Business.

UNIT III BUSINESS PLAN PREPARATION**9**

Sources of Product for Business - Prefeasibility Study - Criteria for Selection of Product - Ownership - Capital - Budgeting Project Profile Preparation - Matching Entrepreneur with the Project - Feasibility Report Preparation and Evaluation Criteria.

UNIT IV LAUNCHING OF SMALL BUSINESS**9**

Finance and Human Resource Mobilization Operations Planning - Market and Channel Selection - Growth Strategies - Product Launching -Incubation, Venture capital, IT startups.

UNIT V MANAGEMENT OF SMALL BUSINESS**9**

Monitoring and Evaluation of Business - Preventing Sickness and Rehabilitation of Business Units- Effective Management of small Business.

TOTAL :45 PERIODS

COURSE OUTCOME:

Students will gain knowledge and skills needed to start and run an enterprise.

REFERENCES

1. Hisrich, Entrepreneurship, Tata McGraw Hill, New Delhi, 2001.
2. S.S.Khanka, Entrepreneurial Development, S.Chand and Company Limited, New Delhi, 2001.
3. Mathew Manimala, Entrepreneurship Theory at the Crossroads, Paradigms & Praxis, Biztrantra, 2nd Edition, 2005
4. Prasanna Chandra, Projects – Planning, Analysis, Selection, Implementation and Reviews, Tata McGraw-Hill, 1996.
5. P.Saravanavel, Entrepreneurial Development, Ess Pee kay Publishing House, Chennai -1997.
6. Arya Kumar. Entrepreneurship. Pearson. 2012
7. Donald F Kuratko, T.V Rao. Entrepreneurship: A South Asian perspective. Cengage Learning. 2012

BA4074 VALUATION OF REAL ESTATE AND INFRASTRUCTURE ASSETS

L	T	P	C
3	0	0	3

COURSE OBJECTIVE:

- To gain knowledge about the valuation of different infrastructure assets

UNIT I REAL ESTATE VALUATION**9**

Scope and objectives -Concepts of valuation - Types of value - Value vs Price vs Cost-Different methods of valuation- SWOT analysis

UNIT II APPROACHES TO REAL ESTATE VALUATION**9**

Sales comparison approach - Cost approach - Income approach - SWOT analysis

UNIT III VALUATION OF VARIOUS CATEGORIES OF REAL ESTATE**9**

Residential real estate valuation - Commercial real estate valuation - Industrial real estate valuation - Retail real estate valuation- Mixed-use real estate valuation

UNIT IV INFRASTRUCTURE ASSET VALUATION**9**

Objective and approaches-Different categories of infrastructure assets- Valuation methodology- Key operational and financial parameters -Valuation framework and models.

UNIT V SECTORAL INFRASTRUCTURE VALUATION**9**

Power sector- IT sector - Telecom sector - Aviation-Education sector- Other service sectors- Plant and Machinery -Case studies

TOTAL :45 PERIODS**COURSE OUTCOMES:**

- Students will gain knowledge and skills in connection to the valuation of different types of real estates and infrastructure assets.

REFERENCES:

1. Infrastructure valuation –Frederic Blanc - Brude and Majid Hasan, EDHEC Risk Institute
2. Infrastructure Asset Management - Frederic Blanc - Brude and Majid Hasan, EDHEC Risk Institute
3. Valuation techniques for infrastructure investment decisions, Michael J. Garvin, Department of Civil Engineering and Engineering Mechanics, Columbia University
4. <https://www.thebalance.com/different-types-of-real-estate-investments-you-can-make-357986>
5. http://rbsa.in/valuation_of_infrastructure_assets_specialized_assets.html
6. http://edhec.infrastructure.institute/wp-content/uploads/publications/blanc-brude_2015a.pdf
7. Application of Real Options in Infrastructure Projects Charles Y.J. Cheah, PhD, CFA

SECTORAL SPECIALISATION IN TOURISM MANAGEMENT**BA4075****TOURISM PRINCIPLES AND PRACTICES**

L	T	P	C
3	0	0	3

COURSE OBJECTIVES:

- To comprehend the conceptual dimensions of tourism industry
- To understand the dynamics of tourism businesses and its impacts

UNIT I INTRODUCTION**9**

Tourist/ Visitor/ Traveler/ Excursionist, Early and Medieval Period of Travel: Renaissance and Its Effects on Tourism - Birth of Mass Tourism, Old and New Age Tourism, Concept of Tourism: Nature - Scope - Characteristics - Components - Significance of Tourism - Tourism System: Interdisciplinary Approaches - Motivations and Deterrents to Travel –Emerging Areas and Practices.

UNIT II FORMS OF TOURISM**9**

Inbound, Outbound, National, International- Alternative Tourism – Inclusive Tourism, Current Trends in Domestic and Global Tourism: Tourism Statistics- Need for Measurement of Tourism - Tourism Demand and Supply.

UNIT III TOURISM INDUSTRY**9**

Structure, Functions and Constituents - Direct, Indirect and Support Services - Basic Components of Tourism: Transport - Accommodation- Facilities & Amenities, Horizontal and Vertical Integration in Tourism Business, Infrastructure & Superstructure.

UNIT IV TOURISM THEORY**9**

Leiper's Geo-Spatial Model - Mill-Morrison's Tourism Policy Model - Mathieson & Wall's Travel Buying Behaviour Model - Butler's Tourism Area Life Cycle (TALC) Model - Doxey's Irridex Model – Crompton's Push and Pull Theory- Stanley Plog's Psychographic Model- Gunn's Tourism Planning Model

UNIT V TOURISM ORGANIZATIONS**9**

UNWTO, IATA, ICAO, WTTC, IHA, TAAI, FHRAI, ITDC, ICPB, IATO, IRCTC, State Tourism Development Corporations, Airport Authority of India, Archaeological Survey of India, Ministries of Tourism and Culture, Director General of Civil Aviation, Government of India.

TOTAL: 45 PERIODS**COURSE OUTCOME:**

- Students will learn the practices and ways to promote the tourism industry.

REFERENCES:

1. Rajat Gupta, Nishant Singh, Ishita Kirar and Mahesh Kumar Bairwa, Hospitality and Tourism Management, Vikas Publishing House Pvt. Ltd., 2015
2. Charles R. Goeldner and J. R. Brent Ritchie, Tourism: Principles, Practices, Philosophies, 12th Edition, Wiley, 2016
3. Sampad Kumar Swain and Jitendra Mohan Mishra, Tourism: Principles and Practices (Oxford Higher Education), Nov 2011
4. Chris Cooper, John Fletcher, Alan Fyall, David Gilbert and Stephen Wanhill, Tourism: Principles and Practice, 5th Edition, Pearson Education Limited, 2013
5. Renu Malra, Tourism Principles Practices Concepts And Philosophies, Anmol Publications Pvt. Ltd., 2013

COURSE OBJECTIVE:

- To enable the students to enhance the skills and knowledge on travel industry and its types.

UNIT I INTRODUCTION**9**

Travel Industry – modes of Travel – Air, Rail, Road, Sea, Authorities; Classification of travels- Inbound& Outbound Tours- Classification

UNIT II TRAVEL AGENCY**9**

Introduction to Travel Trade: Historical Background of Travel Trade, Significance of Travel Agency Business, Meaning of Travel Agency- Types of Travel Agent- Full Service Agency, Commercial Agency, Implant Agency, Group / Incentive Agency, Types of Tour Operator- Inbound, Outbound , Domestic, Ground and Specialized.

UNIT III COMPONENTS OF TRAVEL MANAGEMENT**9**

Market Survey and Research , A Guide to Marketing of Leisure Activities, Marketing Techniques of a Travel management - Marketing of Conferences, Congress, Conventions, Incentive Travel, Workshops, Seminars, MICE, Fare constructions and Scheduling - railway and airlines, consumer mix, Rules and regulations for registration - International Travel Formalities- Foreign Exchange Regulations, passport, visas, Clearances and other Procedures.

UNIT IV CARGO MANAGEMENT**9**

Air & Sea ,Pre-requisites, Different types of Cargo, Documentations, Cargo Rates, Loading, Manifestation, Transshipment, Handling at Destination, Regulations.

UNIT V MODERNIZATION AND TRENDS IN TRAVEL INDUSTRY**9**

Impact of Liberalization, Strategic trends in Travel Industry- Disinvestments, Takeovers, Consolidations, and Acquisitions in Travel Industry.

TOTAL : 45 PERIODS**COURSE OUTCOME:**

- The learners will have a complete idea about the different concepts, trends and strategies used in this industry.

REFERENCES:

1. Chand, M. (2009), Travel Agency Management: An Introductory Text. Anmol Publications Pvt. Ltd., New Delhi.
2. Swain, S.K. & Mishra, J.M.(2012). Tourism: Principles & Practices. Oxford University Press, New Delhi.
3. Holloway, J.C. (2012), The Business of Tourism, Prentice Hall, London,
4. Roday. S, Biwal. A & Joshi. V. (2009), Tourism Operations and Management, Oxford University Press, New Delhi.
5. Goeldner, R & Ritchie. B (2010), Tourism, Principles, Practices and Philosophies, John Wiley & Sons, London.
6. Negi. J (2009), Travel Agency Operations: Concepts and Principles, Kanishka, New Delhi.
7. Walker, J.R. & Walker, J.J.(2011). Tourism Concepts and Practices, Pearson, New Delhi.

COURSE OBJECTIVE:

- The course aims to provide the past, present and future perspectives of international tourism. The factors and challenges influencing the growth of international tourism will be studied. The students will study the role of international regulatory bodies.

UNIT I THE GLOBAL ENVIRONMENT**9**

Globalization- scope of international tourism- types, Cultural diversity- Intercultural theories-cultural practices-impact on tourism. Cultural influences on intercultural communication-social interactions.

UNIT II INTERNATIONAL TOURISM GROWTH**9**

Economic determinants-forces and factors influencing growth of international tourism, trends - regional, domestic and global tourist movements, methods and measurements in determining future trends. Arrivals – receipts, foreign exchange, emerging trends in international travel, sustainable tourism, experiential tourism, social responsible tourism – Ethics – Emerging threats in International Tourism.

UNIT III REGIONAL DISTRIBUTION OF INTERNATIONAL TOURISM**9**

International Tourism (inbound and outbound tourism) trends in : Europe -France, Spain, Italy, and United Kingdom, USA, Mexico, Caribbean, Islands and Brazil, China, Thailand, Singapore, Australia, and New Zealand, South Africa, Kenya and Egypt.

UNIT IV INTERNATIONAL TRENDS**9**

Tourism bills of Rights, tourism code, Manila declaration, International conventions: Warsaw convention 1924, Chicago convention 1944, Brussels convention 1961 and 1966, Athens convention 1974, Helsinki accord 1974, IATA conditions of carriage (passage and baggage). World travel laws.

UNIT V ROLE OF GOVERNMENT AND INTERNATIONAL TOURISM BODIES/ ORGANISATIONS**9**

Tourism Bodies :Need for Tourism organizations, Functions, Administrative set up: National Tourism Organization (NTO).

Tourism Organizations : Role of United Nations World Tourism Organization (UNWTO); World Travel & Tourism Council (WTTC); Pacific Asia Travel Association (PATA) : International Air Transports Association (IATA): International Union of Official Travel Organisation (IUOTO); UFTAA, WATA, International Civil Aviation Organisation(ICAO), Travel industry fairs – advantages of participation. Travel Mart – WTM, ITB, KTM and FITUR.

TOTAL: 45 PERIODS**COURSE OUTCOME:**

- The students will be able to comprehend the importance of international tourism, trends, formalities. They will know the importance of regulatory bodies in international tourism.

REFERENCES:

1. Yvette Reisinger, International Tourism- Cultures and Behavior, Taylor & Francis, 2011.
2. A. K. Bhatia, International Tourism Management, Sterling Publishers Private Limited, 2011.
3. Roland Conrady and Martin Buck, Trends and Issues in Global Tourism, Springer Science & Business Media, 2012
4. Myra Shackley, Atlas of Travel and Tourism Development, Routledge, 2006.
5. Sarah M. Lyon and E. Christian Wells, Global Tourism: Cultural Heritage and Economic Encounters, Lanham, MD, AltaMira Press, 2012.
6. John Burkart, S. Medlik, Tourism: Past, Present and Future, Helnemann, 2 nd edition,1986.
7. TejVir Singh, H. Leo Theuns and Frank M. Go, Towards Appropriate Tourism: The Case of Developing Countries, European University Studies, Series 11, 1989.
8. Robert Christie Mill and Alastair M. Morrison, The Tourism System: An Introductory Text, Prentice-Hall,1992.

BA4078**TOURISM GEOGRAPHY**

L	T	P	C
3	0	0	3

COURSE OBJECTIVE:

- To introduce the students to the various geographical locations across the world with a tourism perspective.

UNIT I BASIC GEOGRAPHY**9**

Definition, scope and importance of Tourism geography, Impact of weather and climate on Tourist destinations. Study of maps, longitude & latitude, international date line, time variations, time difference, GMT variations, concepts of elapsed time, flying time, ground time. Standard time and summer time (day light saving time).

UNIT II INDIA**9**

Physical Factors – Relief, Climate, Vegetation, wildlife, water Bodies. Socio-cultural and economic factors influencing tourism in India - Political boundaries and major tourist attractions. Modes of travel to the places of tourism in India

UNIT III ASIA, CANADA AND EUROPE**9**

An overview of the physical features, political boundaries, tourism destinations and best time to visit the following countries in Asia and Europe, the states in Canada, and available modes of travel to these destination countries/states from India.

Asia: China, Mongolia, Japan, Korea, Thailand, Philippines, Singapore, Malaysia, Bangladesh, Maldives, Nepal, Pakistan, Sri Lanka. Canada: Ontario, Ottawa, Montreal, British Columbia. Europe - England, France, Italy, Spain, Ireland, Turkey, Spain, Netherlands, Czech Republic, Austria, Germany, Greece, Switzerland, Russia, Ukraine

UNIT IV UNITED STATES OF AMERICA, CENTRAL AND SOUTH AMERICA**9**

An overview of the physical features, political boundaries, tourism destinations, best time to visit the following states in USA, Central and South America and available modes of travel to these destinations from India.

United States of America: California, New York, Texas, Pennsylvania, Florida, Virginia, Massachusetts, Ohio, Washington, Florida, Nevada, Georgia, Hawaii, North and South Carolina and Rhode Island. Central America - Costa Rica, Panama, Nicaragua, Guatemala, Honduras, Belize. South America: Peru, Ecuador, Venezuela, Chile, Bolivia, Brazil.

UNIT V AFRICA, UAE AND AUSTRALIA**9**

An overview of the physical features, political boundaries, tourism destinations, best time to visit the following countries in Africa, UAE and Australia and the available modes of travel to these destinations from India.

Africa: Kenya, Zimbabwe, Zambia, Egypt, Mali, South Africa, Morocco, Ethiopia, Uganda, Rwanda, Congo, Tanzania, Mauritius, Gambia. Middle East: United Arab Emirates, Israel, Saudi Arabia, Iran, Syria, Lebanon, Jordan. Australia, New Zealand and Papua New Guinea

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

- General knowledge of worldwide tourism flows
- Ability to Plan a trip to a tourism destination

REFERENCES:

1. Alan A. Lew, Colin Michael Hall, Dallen J. Timothy, World Geography of Travel and Tourism: A Regional Approach, Butterworth-Heinemann, 2008.
2. Robinson H.: A Geography of Tourism, Mac Donald & Evans London, 1978
3. Douglas Pearce, Topics in Applied Geography, Tourism Development, Longman Scientific Technical, New York, 1995.
4. Majid Husain, Geography of India, Tata McGraw Hill, 2012.

BA4079**CULTURE AND HERITAGE****L T P C**
3 0 0 3**COURSE OBJECTIVES:**

- To provide the background of Indian culture and heritage
- To give students a solid foundation for understanding and managing cultural diversity in the workplace.

UNIT I INTRODUCTION TO INDIAN CULTURE AND HERITAGE 9

Salient features of Indian culture – socio, ethnic historical and religious perspectives of Indian culture; Cultural transition, Indian cultural heritage.

UNIT II CULTURAL DIMENSIONS AND REFLECTIONS 9

Key elements of Indian cultural dimensions –Tangible and intangible culture- Dimensions of national cultures -Distinctiveness of Indian culture in personal life, social life and work life – languages and literature- Cultural traits under major religious background – Reflection in arts, paintings, dance, music – Ceremonies celebrations – Place of worships – Belief, attitude and perception – Museum – Special interest – Tourism

UNIT III CULTURAL MIX 9

Cultural dissimilarities across world – across nation; Major issues – challenges to hospitality industry; Influence of global culture – Relationship between national culture and organization structure; International dimensions of organizational culture; Impact on personal and work life – Impact on tourist.

UNIT IV CROSS CULTURAL MANAGEMENT 9

Frameworks of cross cultural management- Cultural shock and acculturation- Cross- cultural training- Managing multicultural teams- Cultural negotiations- Global leadership and motivational issues-Cultural differences in ethics and decision making

UNIT V GLOBAL APPROACH 9

UNESCO – criteria, fairs and festivals, funding, committee and convention, reporting and monitoring, approved heritage sites-challenges, Impact of IT, Trends.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

- The learners should be able to describe Indian culture and heritage.
- The learners are competent to explain how different national cultures can influence
- The individuals and groups in social and business settings.

REFERENCES:

1. F.r. Allchin, Conservation of Indian Heritage, Cosmo publications, New Delhi
2. David C. Thomas, Cross-cultural management- Essential concepts, Sage Publications, 2008
3. S.M.Dewan, Corporate governance in public sector enterprises, Pearson Longman, 2006.
4. G. Hofstede, Culture and organizations: intercultural cooperation and its importance for survival, Harper Collins, London, 2010.
5. Rajiv Desai , Indian business culture - An Insider's guide , Butterworth and Heinemann,19
6. Ananda Das gupta , Human values in Management , Ashgate publishing limited, 2004.

COURSE OBJECTIVE

- To enable the students to understand the tourist resources in India, prepare a theme based tour itinerary and manage the tourist destinations travel.

UNIT I INTRODUCTION**9**

Tourism Products: Definition, Concept, Characteristics and Classification. Cultural Heritage of India — Stages of evolution, continuity. Heritage - Types of Heritage Tourism, Heritage Management Organizations.

UNIT II NATURAL RESOURCES**9**

Natural resources: Wildlife sanctuaries - National parks - Biosphere reserves – Back water Tourism - Mountain and Hill Tourist Destinations – Islands, Beaches, Caves & Deserts of India.

UNIT III TOURISM CIRCUITS**9**

Major tourism circuits of India: Inter State and Intra-State Circuits - Religious Circuits - Heritage Circuits - Wildlife Circuits.

UNIT IV MANMADE DESTINATIONS AND THEME PARKS**9**

Manmade Destinations: Locations of Adventure sports - Commercial attractions - Amusement Parks – Gaming - Shopping - Live Entertainments - Supplementary accommodation - House boats – Tree houses - Home stays - Tourism by rail - Palace on wheels - Zoological and Botanical Garden.

UNIT V CONTEMPORARY DESTINATIONS IN INDIA**9**

Places and Packages for Ecotourism, Rural Tourism, Golf Tourism, Medical Tourism and Pilgrimage Tourism - Camping Tourism.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

- The students would be able to understand the needs of the tourists and manage their destination requirements.

REFERENCES:

1. S.P. Gupta (2003), Cultural Tourism in India, Indraprastha Museum of Art and Archaeology, New Delhi.
2. Jacob, R. (2012). Indian Tourism Products. Abhijeet publications.
3. Hussain.A.K (2000). The National Culture of India. National Book Trust, New Delhi.
4. Sahai, S. (2006), Indian Architecture: Hindu Buddhist and Jain. Prakash Books.
5. The Gazette of India: History and Culture, Vol.2
6. Incredible India website and Tourism websites of individual states like Tamilnadu, Kerala, etc.

BA4081 ACCOMMODATION AND HOUSE KEEPING MANAGEMENT

L	T	P	C
3	0	0	3

COURSE OBJECTIVES:

- To study the flow of activities and functions in lodging operations.
- To make the learner to understand about the operation and the management of front office and Housekeeping departments in hotels.

UNIT I INTRODUCTION 9

Hotel Industry – Classification of hotels – Other types of lodging – Types of rooms – Tariff Plans – Duties & Responsibilities of front office personnel – Inter-department coordination.

UNIT II FRONT OFFICE MANAGEMENT 9

Room Reservation – Types of reservation – Front office accounting – Registration – Lobby and well desk operations – Guest Services – Settlements – Safety & Security – Night Audit - Yield Management – Budgetary Control.

UNIT III HOUSE KEEPING MANAGEMENT 9

Importance of housekeeping – Departmental Structures – Coordination with other departments – Duties & Responsibilities of Executive housekeeper, Asst. Executive house keeper, floor supervisor, room attendant – House Keeping Control desk.

UNIT IV HOUSE KEEPING FUNCTION 9

Linen & Uniform – Laundry: Equipment, detergents, Stain removal, Laundry Process flow – Sewing – Cleaning Practice: Equipment, Cleaning agents, Cleaning methods – Pest Control – Public area cleaning and maintenance.

UNIT V INFRASTRUCTURE MANAGEMENT & OTHER SOURCES 9

Elements of Interior Decoration & Design – Colours – Furniture – Floor – Lighting – Floral art – Textiles – Carpets – Catering Services – Wellness & Fitness Services – Leisure & Travel Services – Business Services – Concierge services - Innovative ideas.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

- The learners shall be competent in handling Front Office and Housekeeping management operations.
- The learners will be equipped with knowledge on a wide range of front office and housekeeping tasks and situations in a commercial environment.

REFERENCES:

1. James , Hotel Front Office Management, 5th Edition, Wiley, 2014.
2. Sudhir Andrews. Text book of Hotel Housekeeping Management & Operations, Tata McGraw Hill, 2008.
3. Jatashankar R. Tiwari, Hotel Front office & Operations management, Oxford University Press, 2009.
4. Anutosh Bhakta. Professional Hotel Front Office Management. Tata McGraw Hill 2012.
5. Ahmed Ismail. Front Office Operations and Management. Cengage Learning.
6. Raghubalan and Smritee Raghubalan. Hotel Housekeeping Operations and Management. Second Edition. Oxford 2007.
7. Casado, M. Housekeeping Management. John Wiley and Sons, Inc. 2nd edition, 2011.

COURSE OBJECTIVES:

- To facilitate in the understanding of travel media and its role in tourism promotion through public relations.
- To impart and equip the students with practical know-how on travel writing and dynamics of making of travelogues.

UNIT I HISTORICAL UNDERSTANDING OF MASS MEDIUMS 9

History of print media – Global and Indian context, Advent of printing; British and American streams of journalism; Overview of world mass media -- Sky Invasion, Newspapers and Globalization, Role of Travel Media

UNIT II COMMUNICATION MESSAGE AND ITS CONSTRUCTION 9

Idea of a successful message; Ethics, Standards and Practices; Relevance of effective messages, interpretation of cues; How and what you communicate; Self-awareness in travel communication –Power of message/words; Organization – converting information into convenient understandable messages, Interpretation – how easily the thoughts of the source is organized for the receiver to interpret it correctly

UNIT III TRAVEL WRITING 9

News Worthiness of developed Ideas; Writing Travel Pieces; Writing and Submitting Stories for Travel Mediums; Articles and Short Pieces, Travel Magazines, Travel Newsletters, Travel and Guide Books; Travel Reviews; the Internet; Coffee Table Books and Anthologies; Preparing Scripts for Travel Programs; Conducting Interviews; Visual support

UNIT IV GENERAL INTRODUCTION TO PUBLIC RELATIONS 9

Public Relations Fundamentals – Definitions, Practices, Strengths -Duties and responsibilities of a Public relations manager, Code of ethics, Emergence of Public Relations –from ancient times to Modern- the changing role of PR. Grunig and Hunt's four models. Public Relations in India – a historical perspective- pre and post independence era-liberalised economy and corporate -PR in India growth and challenges.

UNIT V ROLE OF PUBLIC RELATIONS 9

Standard PR Tools and Most Common Travel/Tourism PR Tools, PR at Hotels and Lodging Establishments, Restaurant Public Relations, Transportation Public Relations, Destination and Tourist Attraction PR, What Travel and Tourism Employers Should Understand About PR

TOTAL: 45 PERIODS**COURSE OUTCOME:**

- The students will understand about Travel Media and Public Relations field.

REFERENCES :

1. Seema Hasan, Mass Communication Principles and Concepts, 2nd Edition, CBS Publishers & Distributors Pvt Ltd, 2016
2. Dennis E. Deuschl, Travel and Tourism Public Relations – An Introductory Guide for Hospitality Managers, Routledge, 2011
3. Keval J. Kumar, Mass Communication in India, 4th Edition, JAICO Publishing House, 2010
4. Annamalai Murguan, Tourism and Public Relations, Kalpaz Publications, 2013

BA4083 DESTINATION PLANNING AND MANAGEMENT**L T P C
3 0 0 3****COURSE OBJECTIVE:**

- To prepare the learners with knowledge and skills essential to understanding and manage the needs of destination

UNIT I INTRODUCTION 9

Tourists destination-concepts/ notions; Destination- Elements of Tourists Destination - Characteristics of successful destination- Uniqueness of destination management- Sustainable Tourism Development : Meaning , Principles and Practices

UNIT II TOURISM DESTINATION PLANNING 9

Tourists destination development; planning and development of tourism; Traditional and contemporary approaches to destination planning- History & Influence on planning- Factors affecting the planning process- Stages in destination planning Benefits of strategic plans- Outcome of destination planning - Strategic Plans
Environment Analysis, Resource Analysis, Regional Environment analysis. Market analysis, competitor's analysis

UNIT III DESTINATION PRODUCT DEVELOPMENT & PROMOTION 9

Destination Marketing Mix - Destination Competitiveness – Distribution Channels- Marketing Communication and Strategies. Segmenting, Targeting, and Positioning. Destination branding, Destination Image

Resort development-Types, Planning and Development

UNIT IV TOURISM DESTINATION MANAGEMENT 9

Stakeholders in destination management- Destination governance- Destination management organization (DMO)Partnership and Team-building –Leadership and Coordination- Community Relations& Roles Tourists Destination - Destination Information and Communication Technologies - Future of Destination Management

UNIT V EMERGING TRENDS IN DESTINATION MANAGEMENT 9

Environmental Management Systems -Integrated Coastal Zone Management- Eco-friendly Practices -Water Conservation- Energy Efficiency - Waste Management - Commoditisation Community Participation– Responsible tourism - Space Tourism - Recent Trends - Best Practices.

TOTAL : 45 PERIODS**COURSE OUTCOME:**

- The learners shall be competent for analyzing how the destinations are segmented to handle and design a product of their own.

REFERENCES:

1. C.Gunn (2002), Tourism Planning: Basic, Concepts and Cases, Cognizant Publication.
2. Krishan K. Kamra, Managing Tourist Destination: Development, Planning, Marketing & Policies, Kanishka Publishers, 2005.
3. Alastair Morrison, Marketing & Managing Tourism Destination, Routledge Publications, 2013.
4. Nigel Morgan, Annette Pritchard & Roger Pride (2011), Destination branding: Creating the Unique Proposition, Butterworth and Heinemann , 3 rd edition.
5. Middleton, V.T.C and Hawkins, R. (1998), Sustainable Tourism: A Marketing Perspective, Butterworth – Heinemann, Oxford.
6. Shalini Singh, DallenJ.Timothy& Ross Kingston Dowling (2003), Tourism in Destination Communities, CABI Publishing.
7. The Environment (Protection) Act, 1986, amended 1991, <http://envfor.nic/legis/legis.htm>
8. A practical guide to Tourism Destination Management, World Tourism Organization Publication.

COURSE OBJECTIVE:

- To make the students knowledgeable in tour operations and its related documentation. The student will study the tour preparation, marketing tour products and the role of guides and escorts in tour operations.

UNIT I TOUR INDUSTRY 9

Tour operations business – definition, evolution; Types of tours – inbound, outbound, escorted, guided, types of package tours and operators; factors affecting tour design and selection; Tourism intermediaries - mass-market package holidays, specialist tour operators, domestic & international, collaborative tourism.

UNIT II ITINERARY PREPARATION 9

Itinerary Preparation -meaning, types, Resources and steps of preparation, Do's and don'ts of itinerary preparation; Tour Formulation and Designing Process - Starting of tour operations business, departments of tour operations, tour departure procedure, activities.

UNIT III TOUR OPERATIONS BUSINESS 9

Tour operations process, research, planning, costing, costing elements; Tour operations business – role, relevance, tour operational techniques – Booking a tour, reservations, hotel booking procedures, boarding bus/coach, emergency procedures, finance details, travel insurance, Foreign Exchange, Cargo, documentation, food and beverages, transportation delays; Recognition - IATA Accreditation - Recognition from Government; Travel trade organizations – Objectives, activities and functions.

UNIT IV MARKETING AND PROMOTION OF TOUR 9

Marketing and promotion of tour – marketing strategies of tour operation business, tour brochure, how to prepare a tour brochure, items to be included in tour brochure, tools used to market tour packages, Indian and world tourism day; Promotion of Tour Operation - Mix and Media, Types of media, Selection criteria; Tour Pricing - Calculation of Tour Price - Pricing Strategies.

UNIT V GUIDING AND ESCORTING 9

Guiding and escorting – meaning, concepts, golden rules of guiding, difference between guide and escort, skills, responsibilities of guides, interpreting sites, escorts, personal hygiene, grooming, pre, post, and during tour responsibilities, checklist, safety and security, insurance, first aid, emergency handling, leading a group, code of conduct.

TOTAL:45 PERIODS**COURSE OUTCOME:**

- The students will have good learning on tour operations. They can prepare and market tour itinerary. They will know the importance of tour operators, guides and escorts.

REFERENCES:

1. K. Bhatia, Business of Travel Agency & Tour Operations Management, Sterling Publishers, 2012.
2. Jagmohan Negi, Travel Agency and Tour Operation Concepts and Principles, Kanishka Publishers & Distributors, 2006.
3. Lalita Sharma, Travel Agency & Tour Operation Concepts and Principles, Centrum Press, 2010.
4. Dennis L. Foster, The Business of Travel: Agency Operations and Administration, Glencoe Division, Macmillan/McGraw-Hill, 1991.
5. Sunetra Roday, Archana Biwaland Vandana Joshi, Tourism: Operations and Management, Oxford University Press, 2009.

BA4085**LEISURE AND RECREATION MANAGEMENT**

L	T	P	C
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COURSE OBJECTIVE:

- To introduce the student to the broad base of study needed for understanding of the fundamentals of and issues in leisure and recreation management.

UNIT I INTRODUCTION TO LEISURE**9**

Introduction, the historical analysis of leisure, Leisure – the social context, Demand for leisure, leisure participation and leisure behavior, Supply for leisure, leisure places, spaces and environment, Planning, managing and marketing leisure.

UNIT II SECTORS IN LEISURE**9**

The public, private and voluntary sectors in leisure provision, Leisure and the experience economy: the cultural industries and entertainment, Urban leisure, Coastal leisure, Rural leisure, Future of leisure.

UNIT III INTRODUCTION TO RECREATION**9**

Recreation: an overview - Recreation & Leisure Participation and Behavior - Role in Health & Well-Being - Leisure & Culture - Mass Leisure: Popular Culture & Purple Leisure - Balancing Leisure & Work services.

UNIT IV RECREATION MANAGEMENT**9**

Recreation Theories -Impact of recreation on tourism - Recreation Resource Management - Recreational and Tourist Motivation - Barriers to Recreation - Gender and Social Constraints Tourism and recreation planning and policy - Urban and rural recreation - Relationships between leisure, recreation and tourism.

UNIT V RECENT TRENDS**9**

Trends in the recreation industry- Tourists and recreational demand for wilderness, National Parks and natural areas - Supply of the wilderness and outdoor recreation experience Tourism recreation and climate change - Environmental perspectives on coastal recreation and tourism. Technology Impacts on Recreation & Leisure

TOTAL: 45 PERIODS**COURSE OUTCOME:**

- Ability to design, conduct, promote, evaluate, and manage activities involved in the successful operation of a variety of leisure and recreation organizations and operations

REFERENCES:

1. Stephen J. Page and Joanne Connell, Leisure – An Introduction, Pearson Education Limited, 2010.
2. George Torkildsen (2000), Leisure and Recreation Management, Fourth Edition, E&FN Spon, London.
3. Daniel D. McLean and Amy R. Hurd, Kraus' Recreation and Leisure in Modern Society, Jones and Bartlett Learning, 10th Edition, 2015.
4. William C. Gartner & David W. Lime (2000), Trends in Outdoor, Recreation, Leisure and Tourism, CABI, London.
5. Chris Ryan (2006), Recreational Tourism, Demands and Impacts, Viva Books, New Delhi.
6. Michael Hall.C. & James Higham (2006), Tourism, Recreation and Climate Change, Viva Books, New Delhi.

BA4086

MEDICAL TOURISM

L T P C
3 0 0 3**COURSE OBJECTIVE:**

- To give an overview of global health care practices and strategies for marketing and communications in India with focus on international tourists.

UNIT I INTRODUCTION TO HEALTH CARE IN INDIA

9

Historical Review – Health care services: Level & Types — Disease burden - Public Services in India - Private health care sector growth: a retrospective & road ahead— Pharmaceutical, Biotechnology - Health Insurance- Financing and delivery of health services: Issues & Challenges.

UNIT II MEDICAL TOURISM

9

Concept, typology Genesis and growth of Medical Tourism - benefits of medical tourism, Factors responsible for growth of health and medical tourism. Medical Tourism Business- Global medical tourism scenario, Stakeholders, countries promoting medical tourism – Health and Medical Tourism markets at global level.

UNIT III MEDICAL TOURISM PRODUCT AND PACKAGE

9

Factors and Steps for designing product and tour package, development, issues and considerations, Approvals and formalities, Pre-tour arrangements, tour operations and post-tour management, Health Insurance, Claiming Health Insurance

UNIT IV LEGAL ASPECTS OF MEDICAL TOURISM

9

Certification and Accreditation in health and medical tourism, Ethical, legal, economic and environmental issues in health and medical tourism. An Introduction to National Accreditation Board for Hospitals & Healthcare (NABH) and Joint Commission International (JCI).

UNIT V MEDICAL TOURISM IN INDIA

9

Centres/Destinations, Current and futuristic trends, Potentials, Issues and Challenges, Trousing the challenges, Government Support.

TOTAL : 45 PERIODS**COURSE OUTCOME:**

- The students will have an overview of contemporary tourism practices and global perspectives.

REFERENCES:

1. MilicaZ. Bookman Karla R. Bookman, Medical Tourism in developing countries, palgrave Macmillan tm 2007.
2. Raj Pruthi, Medical Tourism in India , Arise publishers & Distributors, 2006
3. RNCOS, Opportunities in Medical Tourism in India(2007), RNCOS E-Services Pvt. Ltd., 2006.
4. Michael D. Horowitz Jeffrey A. Rosensweig, Medical Tourism – Health Care in The global economy (Trends), American College of Physician Executive, 2007.
5. Sonali Kulkarni, Medical Tourism in India, Book Enclave, 2008
6. Glenn Cohen, Patients with Passports: Medical Tourism, Law, and Ethics, Oxford University Press, 2015


PRINCIPAL

**JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 508.
GOBI (Tk), ERODE (Dt).**

ANNA UNIVERSITY, CHENNAI
AFFILIATED INSTITUTIONS
REGULATIONS – 2017

CHOICE BASED CREDIT SYSTEM

MASTER OF BUSINESS ADMINISTRATION (GENERAL)

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs) :

MBA programme curriculum is designed to prepare the post graduate students

- I. To have a thorough understanding of the core aspects of the business.
- II. To provide the learners with the management tools to identify, analyze and create business opportunities as well as solve business problems.
- III. To prepare them to have a holistic approach towards management functions.
- IV. To motivate them for continuous learning.
- V. To inspire and make them practice ethical standards in business.

PROGRAMME OUTCOMES (POs):

On successful completion of the programme,

1. Ability to apply the business acumen gained in practice.
2. Ability to understand and solve managerial issues.
3. Ability to communicate and negotiate effectively, to achieve organizational and individual goals.
4. Ability to upgrade their professional and managerial skills in their workplace.
5. Ability to explore and reflect about managerial challenges, develop informed managerial decisions in a dynamically unstable environment.
6. Ability to take up challenging assignments.
7. Ability to understand one's own ability to set achievable targets and complete them.
8. Ability to pursue lifelong learning.
9. To have a fulfilling business career.

Programme Educational Objectives	Programme Outcomes								
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
I	✓	✓					✓		
II				✓	✓	✓			
III	✓		✓		✓	✓	✓		
IV				✓		✓	✓	✓	
V		✓	✓					✓	✓

			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
YEAR 1	SEM 1	Principles of Management	✓	✓	✓		✓				
		Accounting for Management	✓			✓					
		Economic Analysis for Business	✓	✓						✓	✓
		Legal Aspects of Business	✓								
		Organizational Behaviour	✓		✓						
		Statistics for Management	✓								
		Total Quality Management				✓	✓				✓
		Spoken and Written Communication	✓		✓						
	SEM 2	Applied Operations Research		✓			✓		✓		
		Business Research Methods		✓			✓		✓		
		Financial Management	✓	✓		✓	✓		✓		✓
		Human Resource Management	✓	✓		✓	✓		✓		✓
		Information Management	✓	✓		✓	✓		✓		✓
		Operations Management	✓	✓		✓	✓		✓		✓
		Marketing Management		✓		✓	✓		✓		
		Data Analysis and Business Modeling				✓	✓	✓			✓
YEAR 2	SEM 3	International Business Management				✓	✓				✓
		Strategic Management	✓	✓		✓	✓	✓	✓	✓	✓
		Elective I	Given below for each stream/Specialization								
		Elective II									
		Elective III									
		Elective IV									
		Elective V									
		Elective VI									
		Summer Training	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SEM 4	Project Work	✓	✓	✓	✓	✓	✓	✓	✓	✓

			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
		Stream/ Specialization : Marketing Management									
		Brand Management	✓		✓		✓			✓	✓
		Consumer Behaviour	✓				✓	✓	✓	✓	✓
		Customer Relationship Management	✓				✓	✓	✓	✓	✓
		Integrated Marketing Communication	✓		✓		✓				✓
		Retail Marketing	✓		✓		✓			✓	✓
		Services Marketing	✓				✓	✓	✓		✓
		Social Marketing	✓				✓	✓	✓	✓	✓
		Stream/ Specialization : Financial Management									
		Banking Financial Services Management	✓		✓		✓			✓	✓
		Corporate Finance	✓		✓	✓				✓	✓
		Derivatives Management	✓		✓				✓	✓	✓
		Merchant Banking and Financial Services	✓		✓		✓			✓	✓
		Security Analysis and Portfolio Management	✓				✓				✓
		Strategic Investment and Financing Decisions	✓		✓			✓		✓	✓
		International Trade Finance	✓		✓		✓			✓	✓
		Stream/ Specialization : Human Resource Management									
		Entrepreneurship Development	✓		✓		✓			✓	✓
		Industrial Relations and Labour Welfare	✓		✓		✓			✓	✓
		Labour Legislations	✓		✓			✓			✓
		Managerial Behaviour and Effectiveness			✓		✓			✓	✓
		Organizational Theory, Design and Development	✓		✓		✓			✓	✓
		Strategic Human Resource Management			✓			✓			✓
		Stream/ Specialization : Systems Management									
		Advanced Database Management System	✓	✓	✓		✓	✓	✓		✓
		Data mining for Business Intelligence	✓		✓			✓			✓
		E-Business Management	✓					✓			✓

		Software Project Management and Quality									
		Enterprise Resource Planning	✓				✓			✓	✓
	Stream/ Specialization : Operations Management										
		Logistics Management	✓		✓					✓	✓
		Materials Management	✓				✓			✓	
		Product Design	✓		✓		✓				✓
		Project Management	✓		✓		✓			✓	✓
		Services Operations Management	✓		✓		✓				✓
		Supply Chain Management	✓		✓		✓			✓	✓

ANNA UNIVERSITY, CHENNAI
 AFFILIATED INSTITUTIONS
 REGULATIONS – 2017
CHOICE BASED CREDIT SYSTEM
MASTER OF BUSINESS ADMINISTRATION (FULL TIME)
 CURRICULA AND SYLLABI I TO IV SEMESTERS
 SEMESTER - I

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	BA5101	Economic Analysis for Business	PC	4	4	0	0	4
2.	BA5102	Principles of Management	PC	3	3	0	0	3
3.	BA5103	Accounting for Management	PC	4	4	0	0	4
4.	BA5104	Legal Aspects of Business	PC	3	3	0	0	3
5.	BA5105	Organizational Behaviour	PC	3	3	0	0	3
6.	BA5106	Statistics for Management	PC	3	3	0	0	3
7.	BA5107	Total Quality Management	PC	3	3	0	0	3
PRACTICALS								
8	BA5111	Spoken and Written Communication #	EEC	4	0	0	4	2
TOTAL				27	23	0	4	25

No end semester examination is required for this course.

SEMESTER - II

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	BA5201	Applied Operations Research	PC	3	3	0	0	3
2.	BA5202	Business Research Methods	PC	3	3	0	0	3
3.	BA5203	Financial Management	PC	3	3	0	0	3
4.	BA5204	Human Resource Management	PC	3	3	0	0	3
5.	BA5205	Information Management	PC	3	3	0	0	3
6.	BA5206	Operations Management	PC	3	3	0	0	3
7.	BA5207	Marketing Management	PC	4	4	0	0	4
PRACTICALS								
8	BA5211	Data Analysis and Business Modelling	EEC	4	0	0	4	2
TOTAL				26	22	0	4	24

SUMMER SEMESTER (4 WEEKS)

SUMMER TRAINING

Summer Training – The training report along with the company certificate should be submitted within the two weeks of the reopening date of 3rd semester. The training report should be around 40 pages containing the details of training undergone, the departments wherein he was trained with duration (chronological diary), along with the type of managerial skills developed during training. The training report should be sent to the Controller of Examinations by the HOD through the Principal, before the last working day of the 3rd Semester.

SEMESTER - III

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	BA5301	International Business Management	PC	3	3	0	0	3
2	BA5302	Strategic Management	PC	3	3	0	0	3
3		Professional Elective I ***	PE	3	3	0	0	3
4		Professional Elective II***	PE	3	3	0	0	3
5		Professional Elective III***	PE	3	3	0	0	3
6		Professional Elective IV***	PE	3	3	0	0	3
7		Professional Elective V***	PE	3	3	0	0	3
8		Professional Elective VI***	PE	3	3	0	0	3
PRACTICALS								
9	BA5311	Summer Training	EEC	2	0	0	2	1
TOTAL				26	24	0	2	25

*** Chosen electives should be from two streams of management of three electives each.

SEMESTER - IV

SI. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
PRACTICALS								
1.	BA5411	Project Work	EEC	24	0	0	24	12
TOTAL				0	0	24	12	

TOTAL NO. OF CREDITS:86

PROFESSIONAL CORE (PC)

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.		Principles of Management	PC	3	3	0	0	3
2.		Accounting for Management	PC	4	4	0	0	4
3.		Economic Analysis for Business	PC	4	4	0	0	4
4.		Legal Aspects of Business	PC	3	3	0	0	3
5.		Organizational Behaviour	PC	3	3	0	0	3
6.		Statistics for Management	PC	3	3	0	0	3
7.		Marketing Management	PC	4	4	0	0	4
8.		Spoken and Written Communication	PC	4	0	0	4	2
9.		Applied Operations Research	PC	3	3	0	0	3
10.		Business Research Methods	PC	3	3	0	0	3
11.		Strategic Management	PC	3	3	0	0	3
12.		Financial Management	PC	3	3	0	0	3
13.		Human Resource Management	PC	3	3	0	0	3
14.		Information Management	PC	3	3	0	0	3
15.		Operations Management	PC	3	3	0	0	3
16.		International Business Management	PC	3	3	0	0	3
17.		Total Quality Management	PC	3	3	0	0	3

PROFESSIONAL ELECTIVES (PE)

FUNCTIONAL SPECIALIZATIONS

1. Students can take three elective subjects from two functional specializations
- Or
2. Students can take six elective subjects from any one sectoral specializations

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
Stream/ Specialization : Marketing Management								
1.	BA5001	Brand Management	PE	3	3	0	0	3
2.	BA5002	Consumer Behaviour	PE	3	3	0	0	3
3.	BA5003	Customer Relationship Management	PE	3	3	0	0	3
4.	BA5004	Integrated Marketing Communication	PE	3	3	0	0	3
5.	BA5005	Retail Marketing	PE	3	3	0	0	3
6.	BA5006	Services Marketing	PE	3	3	0	0	3
7.	BA5007	Social Marketing	PE	3	3	0	0	3
Stream/ Specialization : Financial Management								
8.	BA5008	Banking Financial Services Management	PE	3	3	0	0	3
9.	BA5009	Corporate Finance	PE	3	3	0	0	3
10.	BA5010	Derivatives Management	PE	3	3	0	0	3
11.	BA5011	Merchant Banking and Financial Services	PE	3	3	0	0	3
12.	BA5012	Security Analysis and Portfolio Management	PE	3	3	0	0	3
13.	BA5013	Strategic Investment and Financing Decisions	PE	3	3	0	0	3
14.	BA5031	International Trade Finance	PE	3	3	0	0	3
Stream/ Specialization : Human Resource Management								
15.	BA5014	Entrepreneurship Development	PE	3	3	0	0	3
16.	BA5015	Industrial Relations and Labour Welfare	PE	3	3	0	0	3
17.	BA5016	Labour Legislations	PE	3	3	0	0	3
18.	BA5017	Managerial	PE	3	3	0	0	3

		Behaviour and Effectiveness						
19.	BA5018	Organizational Theory, Design and Development	PE	3	3	0	0	3
20.	BA5019	Strategic Human Resource Management	PE	3	3	0	0	3
Stream/ Specialization : Systems Management								
21.	BA5020	Advanced Database Management System	PE	3	3	0	0	3
22.	BA5021	Datamining for Business Intelligence	PE	3	3	0	0	3
23.	BA5022	Enterprise Resource Planning	PE	3	3	0	0	3
24.	BA5023	Software Project Management and Quality	PE	3	3	0	0	3
25.	BA5024	E-Business Management	PE	3	3	0	0	3
Stream/ Specialization : Operations Management								
26.	BA5025	Logistics Management	PE	3	3	0	0	3
27.	BA5026	Materials Management	PE	3	3	0	0	3
28.	BA5027	Product Design	PE	3	3	0	0	3
29.	BA5028	Project Management	PE	3	3	0	0	3
30.	BA5029	Services Operations Management	PE	3	3	0	0	3
31.	BA5030	Supply Chain Management	PE	3	3	0	0	3

SECTORAL SPECIALIZATIONS

1. Students can take three electives subjects from two functional specializations
or
2. Students can take six elective subjects from any one sectoral specializations

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
Sectoral Specialization : Logistics and Supply Chain Management								
1.	BA5051	Supply Chain Concepts and Planning	PE	3	3	0	0	3
2.	BA5052	Sourcing and Supply Management	PE	3	3	0	0	3
3.	BA5053	Supply Chain Inventory Management	PE	3	3	0	0	3
4.	BA5054	Supply Chain Information System	PE	3	3	0	0	3
5.	BA5055	Warehouse Management	PE	3	3	0	0	3
6.	BA5056	Transportation and Distribution Management	PE	3	3	0	0	3
7.	BA5057	Reverse and Contract Logistics	PE	3	3	0	0	3
8.	BA5058	Air Cargo Management	PE	3	3	0	0	3
9.	BA5059	Containerization and Allied Business	PE	3	3	0	0	3
10.	BA5060	Exim Management	PE	3	3	0	0	3
11.	BA5061	Fundamentals of Shipping	PE	3	3	0	0	3
12.	BA5062	Port and Terminal Management	PE	3	3	0	0	3
Sectoral Specialization :Infrastructure and Real Estate Management								
13.	BA5063	Infrastructure Planning Scheduling and Control	PE	3	3	0	0	3
14.	BA5064	Contracts and Arbitration	PE	3	3	0	0	3
15.	BA5065	Project Management for Infrastructure	PE	3	3	0	0	3
16.	BA5066	Management of Human Resources, Safety and Quality	PE	3	3	0	0	3
17.	BA5067	Disaster Mitigation and Management	PE	3	3	0	0	3
18.	BA5068	Economics and Financial Management in Construction	PE	3	3	0	0	3
19.	BA5069	Urban Environmental Management	PE	3	3	0	0	3
20.	BA5070	Smart Materials, Techniques and Equipments for Infrastructure	PE	3	3	0	0	3
21.	BA5071	Strategic Airport Infrastructure Management	PE	3	3	0	0	3
22.	BA5072	Real Estate Marketing and Management	PE	3	3	0	0	3
23.	BA5073	Infrastructure and Real Estate Entrepreneurship	PE	3	3	0	0	3
24.	BA5074	Valuation of Real Estate and Infrastructure Assets	PE	3	3	0	0	3

EMPLOYABILITY ENHANCEMENT COURSES (EEC)

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.	BA5111	Spoken and Written Communication #	EEC	4	0	0	4	2
2.	BA5211	Data Analysis and Business Modeling	EEC	4	0	0	4	2
3.	BA5311	Summer Training	EEC	2	0	0	2	1
4.	BA5411	Project Work	EEC	24	0	0	24	12

OBJECTIVES:

- To introduce the concepts of scarcity and efficiency; to explain principles of micro economics relevant to managing an organization; to describe principles of macro economics to have the understanding of economic environment of business.

UNIT I INTRODUCTION**8**

The themes of economics – scarcity and efficiency – three fundamental economic problems – society's capability – Production possibility frontiers (PPF) – Productive efficiency Vs economic efficiency – economic growth & stability – Micro economies and Macro economies – the role of markets and government – Positive Vs negative externalities.

UNIT II CONSUMER AND PRODUCER BEHAVIOUR**13**

Market – Demand and Supply – Determinants – Market equilibrium – elasticity of demand and supply – consumer behaviour – consumer equilibrium – Approaches to consumer behaviour – Production – Short-run and long-run Production Function – Returns to scale – economies Vs diseconomies of scale – Analysis of cost – Short-run and long-run cost function – Relation between Production and cost function.

UNIT III PRODUCT AND FACTOR MARKET**13**

Product market – perfect and imperfect market – different market structures – Firm's equilibrium and supply – Market efficiency – Economic costs of imperfect competition – factor market – Land, Labour and capital – Demand and supply – determination of factor price – Interaction of product and factor market – General equilibrium and efficiency of competitive markets.

UNIT IV PERFORMANCE OF AN ECONOMY – MACRO ECONOMICS**13**

Macro-economic aggregates – circular flow of macroeconomic activity – National income determination – Aggregate demand and supply – Macroeconomic equilibrium – Components of aggregate demand and national income – multiplier effect – Demand side management – Fiscal policy in theory.

UNIT V AGGREGATE SUPPLY AND THE ROLE OF MONEY**13**

Short-run and Long-run supply curve – Unemployment and its impact – Okun's law – Inflation and the impact – reasons for inflation – Demand Vs Supply factors – Inflation Vs Unemployment tradeoff – Phillips curve – short-run and long-run – Supply side Policy and management – Money market – Demand and supply of money – money-market equilibrium and national income – the role of monetary policy.

TOTAL: 60 PERIODS**OUTCOMES:**

- Students are expected to become familiar with both principles of micro and macro economics. They would also become familiar with application of these principles to appreciate the functioning of both product and input markets as well as the economy.

REFERENCES :

1. Paul A. Samuelson, William D. Nordhaus, Sudip Chaudhuri and Anindya Sen, Economics, 19th edition, Tata McGraw Hill, New Delhi, 2010.
2. William Boyes and Michael Melvin, Textbook of economics, Biztantra, 9th Edition, 2012.
3. N. Gregory Mankiw, Principles of Economics, 7th edition, Cengage, New Delhi, 2014
4. Richard Lipsey and Alec Charystal, Economics, 12th edition, Oxford, University Press, New Delhi, 2011.
5. Karl E. Case and Ray C. Fair, Principles of Economics, 12th edition, Pearson, Education Asia, New Delhi, 2014.

OBJECTIVES:

- To familiarize the students to the basic concepts of management in order to aid in understanding how an organization functions, and in understanding the complexity and wide variety of issues managers face in today's business firms.

UNIT I INTRODUCTION TO MANAGEMENT 9

Organization- Management- Role of managers- Evolution of management thought- Organization and the environmental factors- Managing globally- Strategies for International business.

UNIT II PLANNING 9

Nature and purpose of planning- Planning process- Types of plans- Objectives- Managing by Objective (MBO) strategies- Types of strategies – Policies – Decision Making- Types of decision- Decision making process- Rational decision making process- Decision making under different conditions.

UNIT III ORGANISING 9

Nature and purpose of organizing- Organization structure- Line and staff authority- Departmentation- Span of control- Centralization and decentralization- Delegation of authority- Staffing- Selection and Recruitment- Career development- Career stages- Training- Performance appraisal

UNIT IV DIRECTING 9

Managing people- Communication- Hurdles to effective communication- Organization culture- Elements and types of culture- Managing cultural diversity.

UNIT V CONTROLLING 9

Process of controlling- Types of control- Budgetary and non-budgetary control techniques - Managing productivity- Cost control- Purchase control- Maintenance control- Quality control- Planning operations.

TOTAL: 45 PERIODS**OUTCOMES:**

- The students should be able to describe and discuss the elements of effective management,
- discuss and apply the planning, organizing and control processes,
- describe various theories related to the development of leadership skills, motivation techniques, team work and effective communication,
- communicate effectively through both oral and written presentation.

REFERENCES:

- Andrew J. Dubrin, Essentials of Management, Thomson Southwestern, 9th edition, 2012.
- Samuel C. Certo and Tervis Certo, Modern management: concepts and skills, Pearson education, 12th edition, 2012.
- Harold Koontz and Heinz Weihrich, Essentials of management: An International & Leadership Perspective, 9th edition, Tata McGraw-Hill Education, 2012.
- Don Hellriegel, Susan E. Jackson and John W. Slocum, Management- A competency-based approach, Thompson South Western, 11th edition, 2008.
- Heinz Weihrich, Mark V Cannice and Harold Koontz, Management- A global entrepreneurial perspective, Tata McGraw Hill, 13th edition, 2010.
- Stephen P. Robbins, David A. De Cenzo and Mary Coulter, Fundamentals of Management, Prentice Hall of India, 2012.

OBJECTIVES :

- Acquire a reasonable knowledge in accounts
- Analysis and evaluate financial statements

UNIT I FINANCIAL ACCOUNTING**12**

Introduction to Financial, Cost and Management Accounting- Generally accepted accounting principles, Conventions and Concepts-Balance sheet and related concepts- Profit and Loss account and related concepts - Introduction to inflation accounting- Introduction to human resources accounting.

UNIT II COMPANY ACCOUNTS**12**

Meaning of Company -Maintenance of Books of Account-Statutory Books- Profit or Loss Prior to incorporation- Final Accounts of Company- Alteration of share capital- Preferential allotment, Employees stock option- Buyback of securities.

UNIT III ANALYSIS OF FINANCIAL STATEMENTS**12**

Analysis of financial statements – Financial ratio analysis, cash flow (as per Accounting Standard 3) and funds flow statement analysis.

UNIT IV COST ACCOUNTING**12**

Cost Accounts - Classification of manufacturing costs - Accounting for manufacturing costs. Cost Accounting Systems: Job order costing - Process costing- Activity Based Costing- Costing and the value chain- Target costing- Marginal costing including decision making- Budgetary Control & Variance Analysis - Standard cost system.

UNIT V ACCOUNTING IN COMPUTERISED ENVIRONMENT**12**

Significance of Computerised Accounting System- Codification and Grouping of Accounts-Maintaining the hierarchy of ledgers- Prepackaged Accounting software.

TOTAL: 45+15 = 60 PERIODS**OUTCOME**

- Possess a managerial outlook at accounts.

REFERENCES :

1. M.Y.Khan & P.K.Jain, Management Accounting, Tata McGraw Hill, 2011.
2. R.Narayanaswamy, Financial Accounting – A managerial perspective, PHI Learning, New Delhi, 2011.
3. Jan Williams, Financial and Managerial Accounting – The basis for business Decisions, 15th edition, Tata McGraw Hill Publishers, 2010.
4. Horngren, Surdem, Stratton, Burgstahler, Schatzberg, Introduction to Management Accounting, PHI Learning, 2011.
5. Stice & Stice, Financial Accounting Reporting and Analysis, 8th edition, Cengage, 2010.
6. Singhvi Bodhanwala, Management Accounting -Text and cases, PHI Learning, 2009.
7. Ashish K. Battacharya, Introduction to Financial Statement Analysis, Elsevier, 2009.
8. Sawyers, Jackson, Jenkins, Arora, Managerial Accounting, 2nd edition, Cengage, 2011
9. Godwin, Alderman, Sanyal, Financial Accounting, 2nd edition, Cengage, 2011
10. Narashiman.M.S, Financial statement analysis, Cengage, 2016.

OBJECTIVE:

- To create the knowledge of Legal perspective and its practices to improvise the business.

UNIT I COMMERCIAL LAW**9****THE INDIAN CONTRACT ACT 1872**

Definition of contract, essentials elements and types of a contract, Formation of a contract, performance of contracts, breach of contract and its remedies, Quasi contracts - Contract Of Agency: Nature of agency, Creation and types of agents, Authority and liability of Agent and principal: Rights and duties of principal and agents, termination of agency.

THE SALE OF GOODS ACT 1930

Nature of Sales contract, Documents of title, risk of loss, Guarantees and Warranties, performance of sales contracts, conditional sales and rights of an unpaid seller - Negotiable Instruments Act 1881: Nature and requisites of negotiable instruments. Types of negotiable instruments, liability of parties, holder in due course, special rules for Cheque and drafts, discharge of negotiable instruments-GST

UNIT II COMPANY LAW 2013 (amended on 03.05.18)**9**

Major principles – Nature and types of companies, Formation, Memorandum and Articles of Association, Prospectus, Power, duties and liabilities of Directors, winding up of companies, Corporate Governance. Amendments of Companies Act, 2013

UNIT III INDUSTRIAL LAW**9**

An Overview of Factories Act - Payment of Wages Act - Payment of Bonus Act - Industrial Disputes Act.

UNIT IV CORPORATE TAX AND GST (amended on 03.05.18)**9**

Corporate Tax planning, Income Tax, Goods and Services Tax – Introduction, Objective, Classification and practical implications of GST

UNIT V CONSUMER PROTECTION ACT AND INTRODUCTION OF CYBER LAWS**9**

Consumer Protection Act – Consumer rights, Procedures for Consumer grievances redressal, Types of consumer Redressal Mechanism and Forums- Competition Act 2002 - Cyber crimes, IT Act 2000 and 2002, Cyber Laws, Introduction of IPR – Copy rights, Trade marks, Patent Act.

TOTAL: 45 PERIODS**OUTCOME:**

- Legal insight will be established in the business practices according to the situation of changing environment.

TEXT BOOKS

1. Kapoor, N. D.; Elements of Mercantile Law, 30th edition, Sultan Chand & Sons, NewDelhi,2015
2. P. K. Goel, Business Law for Managers, Biztantatara Publishers, India, 2008.
3. Akhileshwar Pathack, Legal Aspects of Business, 4th Edition, Tata McGraw Hill, 2009.
4. P. P. S. Gogna, Mercantile Law, S. Chand & Co. Ltd., India, 11th Edition, 2015
5. Maheshwari, S.N. and S.K. Maheshwari; A Manual of Business Law, 6th Edition, Himalaya Publishing House, 2015.
6. V.S.Datey, GST Ready Reckoner, Taxmann Publishing, July 2017.

OBJECTIVE:

- To provide an overview of theories and practices in organizational behavior in individual, group and organizational level.

UNIT I FOCUS AND PURPOSE**5**

Definition, need and importance of organizational behaviour – Nature and scope – Frame work – Organizational behaviour models.

UNIT II INDIVIDUAL BEHAVIOUR**12**

Personality – types – Factors influencing personality – Theories – Learning – Types of learners – The learning process – Learning theories – Organizational behaviour modification.

Misbehaviour – Types – Management Intervention. Emotions - Emotional Labour – Emotional Intelligence – Theories. Attitudes – Characteristics – Components – Formation – Measurement-Values. Perceptions – Importance – Factors influencing perception – Interpersonal perception- Impression Management. Motivation – Importance – Types – Effects on work behavior.

UNIT III GROUP BEHAVIOUR**10**

Organization structure – Formation – Groups in organizations – Influence – Group dynamics – Emergence of informal leaders and working norms – Group decision making techniques – **Team building** - Interpersonal relations – Communication – Control.

UNIT IV LEADERSHIP AND POWER**8**

Meaning – Importance – Leadership styles – Theories – Leaders Vs Managers – Sources of power – Power centers – Power and Politics.

UNIT V DYNAMICS OF ORGANIZATIONAL BEHAVIOUR**10**

Organizational culture and climate – Factors affecting organizational climate – Importance. Job satisfaction – Determinants – Measurements – Influence on behavior. Organizational change – Importance – Stability Vs Change – Proactive Vs Reaction change – the change process – Resistance to change – Managing change. Stress – Work Stressors – Prevention and Management of stress – Balancing work and Life. Organizational development – Characteristics – objectives –. Organizational effectiveness Developing Gender sensitive workplace

TOTAL: 45 PERIODS**OUTCOME:**

- Students will have a better understanding of human behavior in organization. They will know the framework for managing individual and group performance.

REFERENCES :

- Stephen P. Robins, Organisational Behavior, PHI Learning / Pearson Education, Edition 17, 2016 (Global edition)
- Fred Luthans, Organisational Behavior, McGraw Hill, 12th Edition,
- Mc Shane & Von Glinov, Organisational Behaviour, 4th Edition, Tata Mc Graw Hill, 2007.
- Nelson, Quick, Khandelwal. ORGB – An innovative approach to learning and teaching. Cengage, 2nd edition. 2012
- Ivancevich, Konopaske & Maheson, Oranisional Behaviour & Management, 7th edition, Tata McGraw Hill, 2008.
- Udai Pareek, Understanding Organisational Behaviour, 3rd Edition, Oxford Higher Education, 2011.
- Jerald Greenberg, Behaviour in Organization, PHI Learning. 10th edition. 2011

OBJECTIVE:

- To learn the applications of statistics in business decision making.

UNIT I INTRODUCTION**9**

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

UNIT II SAMPLING DISTRIBUTION AND ESTIMATION**9**

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

UNIT III TESTING OF HYPOTHESIS - PARAMETIRC TESTS**9**

Hypothesis testing: one sample and two sample tests for means and proportions of large samples (z-test), one sample and two sample tests for means of small samples (t-test), F-test for two sample standard deviations. ANOVA one and two way.

UNIT IV NON-PARAMETRIC TESTS**9**

Chi-square test for single sample standard deviation. Chi-square tests for independence of attributes and goodness of fit. Sign test for paired data. Rank sum test. Kolmogorov-Smirnov – test for goodness of fit, comparing two populations. Mann – Whitney U test and Kruskal Wallis test. One sample run test.

UNIT V CORRELATION AND REGRESSION**9**

Correlation – Coefficient of Determination – Rank Correlation – Regression – Estimation of Regression line – Method of Least Squares – Standard Error of estimate.

TOTAL: 45 PERIODS**OUTCOME:**

To facilitate objective solutions in business decision making under subjective conditions.

REFERENCES:

1. Richard I. Levin, David S. Rubin, Sanjay Rastogi Masood Husain Siddiqui, Statistics for Management, Pearson Education, 7th Edition, 2016.
2. Prem.S.Mann, Introductory Statistics, 7th Edition, Wiley India, 2016.
3. Gareth James, Daniela Witten, Trevor Hastie, Robert Tibshirani, An Introduction to Statistical Learning with Applications in R, Springer, 2016.
4. Aczel A.D. and Sounderpandian J., "Complete Business Statistics", 6th edition, Tata McGraw Hill Publishing Company Ltd., New Delhi, 2012.
5. Anderson D.R., Sweeney D.J. and Williams T.A., Statistics for business and economics, 11th edition, Thomson (South – Western) Asia, Singapore, 2012.
6. N. D. Vohra, Business Statistics, Tata McGraw Hill, 2012.
7. Ken Black, Applied Business Statistics, 7th Edition, Wiley India Edition, 2012.

OBJECTIVE:

- To learn the quality philosophies and tools in the managerial perspective.

UNIT I INTRODUCTION**9**

Quality – vision, mission and policy statements. Customer Focus – customer perception of quality, Translating needs into requirements, customer retention. Dimensions of product and service quality. Cost of quality.

UNIT II PRINCIPLES AND PHILOSOPHIES OF QUALITY MANAGEMENT**9**

Overview of the contributions of Deming, Juran Crosby, Masaaki Imai, Feigenbaum, Ishikawa, Taguchi techniques – introduction, loss function, parameter and tolerance design, signal to noise ratio. Concepts of Quality circle, Japanese 5S principles and 8D methodology.

UNIT III STATISTICAL PROCESS CONTROL**9**

Meaning and significance of statistical process control (SPC) – construction of control charts for variables and attributed. Process capability – meaning, significance and measurement – Six sigma - concepts of process capability. Reliability concepts – definitions, reliability in series and parallel, product life characteristics curve. Total productive maintenance (TMP), Terotechnology. Business process Improvement (BPI) – principles, applications, reengineering process, benefits and limitations.

UNIT IV TOOLS AND TECHNIQUES FOR QUALITY MANAGEMENT**9**

Quality functions development (QFD) – Benefits, Voice of customer, information organization, House of quality (HOQ), building a HOQ, QFD process. Failure mode effect analysis (FMEA) – requirements of reliability, failure rate, FMEA stages, design, process and documentation. Seven Tools (old & new). Bench marking and POKA YOKE.

UNIT V QUALITY SYSTEMS ORGANIZING AND IMPLEMENTATION**9**

Introduction to IS/ISO 9004:2000 – quality management systems – guidelines for performance improvements. Quality Audits. TQM culture, Leadership – quality council, employee involvement, motivation, empowerment, recognition and reward - TQM framework, benefits, awareness and obstacles.

TOTAL: 45 PERIODS**OUTCOME:**

- To apply quality philosophies and tools to facilitate continuous improvement and ensure customer delight.

REFERENCES :

- Dale H. Besterfield, Carol Besterfield – Michna, Glen H. Besterfield, Mary Besterfield – Sacre, Hermant – Urdhwareshe, Rashmi Urdhwareshe, Total Quality Management, Revised Third edition, Pearson Education, 2011
- Shridhara Bhat K, Total Quality Management – Text and Cases, Himalaya Publishing House, II Edition 2010
- Douglas C. Montgomery, Introduction to Statistical Quality Control, Wiley Student Edition, 4th Edition, Wiley India Pvt Limited, 2008.
- James R. Evans and William M. Lindsay, The Management and Control of Quality, Sixth Edition, Thomson, 2005.
- Poornima M. Charantimath, Total Quality Management, Pearson Education, Second Edition, 2011
- Indian standard – quality management systems – Guidelines for performance improvement (Fifth Revision), Bureau of Indian standards, New Delhi.

OBJECTIVES :

- To familiarize learners with the mechanics of writing
- To enable learners to write in English precisely and effectively.
- To enable learners to speak fluently and flawlessly in all kinds of communicative contexts with all nationalities.

UNIT I PERSONAL COMMUNICATION 12

Day-to-day conversation with family members, neighbours, relatives, friends on various topics, context specific - Journal writing, mails/emails, SMS, greeting cards, situation based – accepting/declining invitations, congratulating, consoling, conveying information, oral reports, extempore.

UNIT II EMPLOYABILITY SKILLS 12

Interview skills – HR and technical – Types of interview, preparation for interview, mock interview, Group Discussion – Communication skills in Group Discussion, Structure of GD, GD process, successful GD techniques. Time management and effective planning – identifying barriers to effective time management, time management techniques, relationship between time management and stress management.

UNIT III WORK PLACE COMMUNICATION 12

e-mails, minutes, reports of different kinds – annual report, status report, survey report, proposals, memorandums, presentations, interviews, profile of institutions, speeches, responding to enquiries, complaints, resumes, applications, summarizing, strategies for writing.

UNIT IV RESEARCH WRITING 12

Articles for publication (Journals), developing questionnaire, writing abstract, dissertation, qualities of research writing, data (charts, tables) analysis, documentation.

UNIT V WRITING FOR MEDIA AND CREATIVE WRITING 12

Features for publication (Newspapers, magazines, newsletters, notice-board), case studies, short stories, travelogues, writing for children, translation, techniques of writing.

TOTAL: 60 PERIODS

Note: It is an activity based course. Student individually or as a group can organize event(s), present term papers etc. This will be evaluated by the faculty member(s) handling the course and the consolidated marks can be taken as the final mark.

No end semester examination is required for this course.

OUTCOMES :

Learners should be able to

- Get into the habit of writing regularly.
- Express themselves in different genres of writing from creative to critical to factual writing.
- Take part in print and online media communication
- Read quite widely to acquire a style of writing and
- Identify their area of strengths and weaknesses in writing.
- Speak confidently with any speakers of English, including native speakers.
- Speak effortlessly in different contexts – informal and formal.

REFERENCES :

1. Raymond V Lesikar, John D Pettit, and Mary E Flatly, 2009. Lesikar's Basic Business Communication, 11th ed. Tata McGraw-Hill, New Delhi.
2. E.H. McGrath, S.J. 2012, Basic Managerial Skills for All. 9th ed. Prentice-Hall of India, New Delhi.

Management books

Robin Sharma - The greatness guide
Steven Covey - 7 Habits of Effective people
Arindham Chaudhuri- Count your chickens before they hatch
Ramadurai - TCS Story

Blogs : Seth Godwin, Guy Kawasaki, Kiruba Shankar

Review : Harvard Business review

Reports : Deloitte Netsis

Magazines : Bloomberg Businessweek, Economist

3. Richard Denny, 'Communication to Win; Kogan Page India Pvt. Ltd., New Delhi, 2008.

BA5201

APPLIED OPERATIONS RESEARCH

L T P C
3 0 0 3

OBJECTIVE:

- To learn the concepts of operations research applied in business decision making.

UNIT I INTRODUCTION TO LINEAR PROGRAMMING (LP) 9

Introduction to applications of operations research in functional areas of management. Linear Programming-formulation, solution by graphical and simplex methods (Primal - Penalty, Two Phase), Special cases. Dual simplex method. Principles of Duality. Sensitivity Analysis.

UNIT II LINEAR PROGRAMMING EXTENSIONS 9

Transportation Models (Minimising and Maximising Problems) – Balanced and unbalanced Problems – Initial Basic feasible solution by N-W Corner Rule, Least cost and Vogel's approximation methods. Check for optimality. Solution by MODI / Stepping Stone method. Case of Degeneracy. Transshipment Models. Assignment Models (Minimising and Maximising Problems) – Balanced and Unbalanced Problems. Solution by Hungarian and Branch and Bound Algorithms. Travelling Salesman problem. Crew Assignment Models.

UNIT III INTEGER PROGRAMMING AND GAME THEORY 9

Solution to pure and mixed integer programming problem by Branch and Bound and cutting plane algorithms. Game Theory-Two person Zero sum games-Saddle point, Dominance Rule, Convex Linear Combination (Averages), methods of matrices, graphical and LP solutions.

UNIT IV INVENTORY MODELS, SIMULATION AND DECISION THEORY 9

Inventory Models – EOQ and EBQ Models (With and without shortages), Quantity Discount Models. Decision making under risk – Decision trees – Decision making under uncertainty. Monte-carlo simulation.

UNIT V QUEUING THEORY AND REPLACEMENT MODELS 9

Queuing Theory - single and Multi-channel models – infinite number of customers and infinite calling source. Replacement Models-Individuals replacement Models (With and without time value of money) – Group Replacement Models.

TOTAL: 45 PERIODS

OUTCOME:

- To facilitate quantitative solutions in business decision making under conditions of certainty, risk and uncertainty.

REFERENCES :

1. Paneerselvam R., Operations Research, Prentice Hall of India, Fourth Print, 2008.
2. N. D Vohra, Quantitative Techniques in Management, Tata Mcgraw Hill, 2010.
3. Hamdy A Taha, Introduction to Operations Research, Prentice Hall India, Ninth Edition, 2010.
4. Anderson , Sweeney Williams Solutions Manual to Accompany An Introduction to Management Science Quantitative Approaches To Decision, Cengage , 12th edition , 2012
5. G. Srinivasan, Operations Research – Principles and Applications, II edition , PHI, 2010.
6. Bernard W.Taylor ,Introduction to Management Science , 12 th edition, 2012

BA5202**BUSINESS RESEARCH METHODS****L T P C
3 0 0 3****OBJECTIVE:**

- To familiarise the students to the principles of scientific methodology in business enquiry; to develop analytical skills of business research; to develop the skills for scientific communications.

UNIT I INTRODUCTION**9**

Business Research – Definition and Significance – the research process – Types of Research – Exploratory and causal Research – Theoretical and empirical Research – Cross –Sectional and time – series Research – Research questions / Problems – Research objectives – Research hypotheses – characteristics – Research in an evolutionary perspective – the role of theory in research.

UNIT II RESEARCH DESIGN AND MEASUREMENT**9**

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

UNIT III DATA COLLECTION**9**

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

UNIT IV DATA PREPARATION AND ANALYSIS**9**

Data Preparation – editing – Coding –Data entry – Validity of data – Qualitative Vs Quantitative data analyses – Bivariate and Multivariate statistical techniques – Factor analysis – Discriminant analysis – cluster analysis – multiple regression and correlation – multidimensional scaling – Conjoint Analysis – Application of statistical software for data analysis.

UNIT V REPORT DESIGN, WRITING AND ETHICS IN BUSINESS RESEARCH**9**

Research report – Different types – Contents of report – need of executive summary – chapterization – contents of chapter – report writing – the role of audience – readability – comprehension – tone – final proof – report format – title of the report – ethics in research – ethical behaviour of research – subjectivity and objectivity in research.

TOTAL: 45 PERIODS

OUTCOME:

- Students would become acquainted with the scientific methodology in business domain. They would also become analytically skillful. They would become familiar with the nuances of scientific communications.

REFERENCES :

1. Donald R. Cooper, Pamela S. Schindler and J K Sharma, Business Research methods, 11th Edition, Tata Mc Graw Hill, New Delhi, 2012.
2. Alan Bryman and Emma Bell, Business Research methods, 3rd Edition, Oxford University Press, New Delhi, 2011.
3. Uma Sekaran and Roger Bougie, Research methods for Business, 5th Edition, Wiley India, New Delhi, 2012.
4. William G Zikmund, Barry J Babin, Jon C.Carr, Atanu Adhikari, Mitch Griffin, Business Research methods, A South Asian Perspective, 8th Edition, Cengage Learning, New Delhi, 2012.

BA5203**FINANCIAL MANAGEMENT****L T P C**
4 0 0 4**OBJECTIVES:**

Facilitate student to

- Understand the operational nuances of a Finance Manager
- Comprehend the technique of making decisions related to finance function

UNIT I FOUNDATIONS OF FINANCE:**9**

Introduction to finance- Financial Management – Nature, scope and functions of Finance, organization of financial functions, objectives of Financial management, Major financial decisions – Time value of money – features and valuation of shares and bonds – Concept of risk and return – single asset and of a portfolio.

UNIT II INVESTMENT DECISIONS:**9**

Capital Budgeting: Principles and techniques - Nature of capital budgeting- Identifying relevant cash flows - Evaluation Techniques: Payback, Accounting rate of return, Net Present Value, Internal Rate of Return, Profitability Index - Comparison of DCF techniques Concept and measurement of cost of capital - Specific cost and overall cost of capital.

UNIT III FINANCING AND DIVIDEND DECISION:**9**

Leverages - Operating and Financial leverage – measurement of leverages – degree of Operating & Financial leverage – Combined leverage, EBIT – EPS Analysis- Indifference point.

Capital structure – Theories – Net Income Approach, Net Operating Income Approach, MM Approach – Determinants of Capital structure.

Dividend decision- Issues in dividend decisions, Importance, Relevance & Irrelevance theories – Walter's – Model, Gordon's model and MM model. – Factors determining dividend policy – Types of dividend policies – forms of dividend

UNIT IV WORKING CAPITAL MANAGEMENT:**9**

Principles of working capital: Concepts, Needs, Determinants, issues and estimation of working capital - Accounts Receivables Management and factoring - Inventory management - Cash management - Working capital finance : Trade credit, Bank finance and Commercial paper.

UNIT V LONG TERM SOURCES OF FINANCE: 9
 Indian capital and stock market, New issues market Long term finance: Shares, debentures and term loans, lease, hire purchase, venture capital financing, Private Equity.
TOTAL: 45 PERIODS

OUTCOME:

- Possess the techniques of managing finance in an organization

REFERENCES :

1. M.Y. Khan and P.K.Jain Financial management, Text, Problems and cases Tata McGraw Hill, 6th edition, 2011.
2. M. Pandey Financial Management, Vikas Publishing House Pvt. Ltd., 10th edition, 2012.
3. Aswat Damodaran, Corporate Finance Theory and practice, John Wiley & Sons, 2011.
4. James C. Vanhorne –Fundamentals of Financial Management– PHI Learning, 11th Edition, 2012.
5. Prasanna Chandra, Financial Management, 9th edition, Tata McGraw Hill, 2012.
6. G.Sudersena Reddy, Financial Management- Principles & Practices, Himalaya Publishing House, 2nd Edition, 2010
7. Srivatsava, Mishra, Financial Management, Oxford University Press, 2011
8. Parasuraman.N.R, Financial Management, Cengage, 2014.
9. William R.Lasher, Financial Management, 7th Edition, Cengage, 2014 .
10. Brigham and Ehrhardt, Financial Management, 14th edition, Cengage, 2015.

BA5204 HUMAN RESOURCE MANAGEMENT L T P C
3 0 0 3

OBJECTIVE:

- To provide knowledge about management issues related to staffing, training, performance, compensation, human factors consideration and compliance with human resource requirements.

UNIT I PERSPECTIVES IN HUMAN RESOURCE MANAGEMENT 5
 Evolution of human resource management – The importance of the human factor – Challenges – Inclusive growth and affirmative action -Role of human resource manager – Human resource policies – Computer applications in human resource management – Human resource accounting and audit.

UNIT II THE CONCEPT OF BEST FIT EMPLOYEE 8
 Importance of Human Resource Planning – Forecasting human resource requirement –matching supply and demand - Internal and External sources. Recruitment - Selection – induction – Socialization benefits.

UNIT III TRAINING AND EXECUTIVE DEVELOPMENT 10
 Types of training methods –purpose- benefits- resistance. Executive development programmes – Common practices - Benefits – Self development – Knowledge management.

UNIT IV SUSTAINING EMPLOYEE INTEREST 12
 Compensation plan – Reward – Motivation – Application of theories of motivation – Career management – Development of mentor – Protégé relationships.

UNIT V PERFORMANCE EVALUATION AND CONTROL PROCESS 10
 Method of performance evaluation – Feedback – Industry practices. Promotion, Demotion, Transfer and Separation – Implication of job change. The control process – Importance – Methods – Requirement of effective control systems grievances – Causes – Implications – Redressal methods.
TOTAL: 45 PERIODS

OUTCOME:

- Students will gain knowledge and skills needed for success as a human resources professional

REFERENCES :

- Dessler Human Resource Management, Pearson Education Limited, 14th Edition, 2015.
- Decenzo and Robbins, Fundamentals of Human Resource Management, Wiley, 11th Edition, 2013.
- Luis R.Gomez-Mejia, David B.Balkin, Robert L Cardy. Managing Human Resource. PHI Learning. 2012
- Bernadin , Human Resource Management ,Tata Mcgraw Hill ,8th edition 2012.
- Wayne Cascio, Managing Human Resource, McGraw Hill, 2007.
- Ivancevich, Human Resource Management, McGraw Hill 2012.
- Uday Kumar Haldar, Juthika Sarkar. Human Resource management. Oxford. 2012

BA5205**INFORMATION MANAGEMENT**

L	T	P	C
3	0	0	3

OBJECTIVES :

- To understand the importance of information in business
- To know the technologies and methods used for effective decision making in an organization.

UNIT I INTRODUCTION**10**

Data, Information, Intelligence, Information Technology, Information System, evolution, types based on functions and hierarchy, System development methodologies, Functional Information Systems, DSS, EIS, KMS, GIS, International Information System.

UNIT II SYSTEM ANALYSIS AND DESIGN**10**

Case tools - System flow chart, Decision table, Data flow Diagram (DFD), Entity Relationship (ER), Object Oriented Analysis and Design(OOAD), UML diagram.

UNIT III DATABASE MANAGEMENT SYSTEMS**9**

DBMS – HDBMS, NDBMS, RDBMS, OODBMS, Query Processing, SQL, Concurrency Management, Data warehousing and Data Mart

UNIT IV SECURITY, CONTROL AND REPORTING**8**

Security, Testing, Error detection, Controls, IS Vulnerability, Disaster Management, Computer Crimes, Securing the Web, Intranets and Wireless Networks, Software Audit, Ethics in IT, User Interface and reporting.

UNIT V NEW IT INITIATIVES**8**

Role of information management in ERP, e-business, e-governance, Data Mining, Business Intelligence, Pervasive Computing, Cloud computing, CMM.

TOTAL: 45 PERIODS**OUTCOME**

- Gains knowledge on effective applications of information systems in business

REFERENCES :

- Robert Schultheis and Mary Summer, Management Information Systems – The Managers View, Tata McGraw Hill, 2008.

2. Kenneth C. Laudon and Jane Price Laudon, Management Information Systems – Managing the digital firm, PHI Learning / Pearson Education, PHI, Asia, 2012.
3. Rahul de, MIS in Business, Government and Society, Wiley India Pvt Ltd, 2012
4. Gordon Davis, Management Information System : Conceptual Foundations, Structure and Development, Tata McGraw Hill, 21st Reprint 2008.
5. Haag, Cummings and Mc Cubbrey, Management Information Systems for the Information Age, McGraw Hill, 2005. 9th edition, 2013.
6. Turban, McLean and Wetherbe, Information Technology for Management –Transforming Organisations in the Digital Economy, John Wiley, 6th Edition, 2008.
7. Raymond McLeod and Jr. George P. Schell, Management Information Systems, Pearson Education, 2007.
8. James O Brien, Management Information Systems – Managing Information Technology in the E-business enterprise, Tata McGraw Hill, 2004.
9. Raplh Stair and George Reynolds, Information Systems, Cengage Learning, 10th Edition, 2012
10. Corey Schou and Dan Shoemaker, Information Assurance for the Enterprise – A Roadmap to Information Security, Tata McGraw Hill, 2007.
11. Frederick Gallegor, Sandra Senft, Daniel P. Manson and Carol Gonzales, Information Technology Control and Audit, Auerbach Publications, 4th Edition, 2013.

BA5206

OPERATIONS MANAGEMENT

L T P C
3 0 0 3

OBJECTIVE:

- To provide a broad introduction to the field of operations management and explain the concepts, strategies , tools and techniques for managing the transformation process that can lead to competitive advantage.

UNIT I INTRODUCTION TO OPERATIONS MANAGEMENT 9

Operations Management – Nature, Importance, historical development, transformation processes, differences between services and goods, a system perspective, functions, challenges, current priorities, recent trends; Operations Strategy – Strategic fit , framework; Supply Chain Management

UNIT II FORECASTING, CAPACITY AND FACILITY DESIGN 9

Demand Forecasting – Need, Types, Objectives and Steps. Overview of Qualitative and Quantitative methods. Capacity Planning – Long range, Types, Developing capacity alternatives. Overview of sales and operations planning. Overview of MRP, MRP II and ERP.

Facility Location – Theories, Steps in Selection, Location Models. Facility Layout – Principles, Types, Planning tools and techniques.

UNIT III DESIGN OF PRODUCT, PROCESS AND WORK SYSTEMS 9

Product Design – Influencing factors, Approaches, Legal, Ethical and Environmental issues. Process – Planning, Selection, Strategy, Major Decisions. Work Study – Objectives, Procedure. Method Study and Motion Study. Work Measurement and Productivity – Measuring Productivity and Methods to improve productivity.

UNIT IV MATERIALS MANAGEMENT 9

Materials Management – Objectives, Planning, Budgeting and Control. Purchasing – Objectives, Functions, Policies, Vendor rating and Value Analysis. Stores Management – Nature, Layout, Classification and Coding. Inventory – Objectives, Costs and control techniques. Overview of JIT.

UNIT V SCHEDULING AND PROJECT MANAGEMENT 9
 Project Management – Scheduling Techniques, PERT, CPM; Scheduling - work centers – nature, importance; Priority rules and techniques, shop floor control; Flow shop scheduling – Johnson's Algorithm – Gantt charts; personnel scheduling in services.

TOTAL: 45 PERIODS

OUTCOME:

- Understanding of the strategic and operational decisions in managing manufacturing and service organizations and appreciation of the role of operations management function in an organization.

REFERENCES :

1. Richard B. Chase, Ravi Shankar, F. Robert Jacobs, Nicholas J. Aquilano, Operations and Supply Management, Tata McGraw Hill, 12th Edition, 2010.
2. Norman Gaither and Gregory Frazier, Operations Management, South Western Cengage, 2002.
3. William J Stevenson, Operations Management, Tata McGraw Hill, 11th Edition, 2015.
4. Russel and Taylor, Operations Management, Wiley, 8th Edition, 2015.
5. Kanishka Bedi, Production and Operations Management, Oxford University, 3rd Edition, 2013.
6. Chary S. N, Production and Operations Management, Tata McGraw Hill, 5th Edition, 2013.
7. Aswathappa K and Shridhara Bhat K, Production and Operations Management, Himalaya Publishing House, Revised Second Edition, 2008.
8. Mahadevan B, Operations Management Theory and practice, Pearson Education, 3rd Edition, 2015
9. Pannersevlam R, Production and Operations Management, Prentice Hall India, Second Edition, 2008.

BA5207 MARKETING MANAGEMENT L T P C
4 0 0 4

OBJECTIVES:

- Developing an understanding of ideas and nuances of modern marketing
- Describe the process to formulate and manage the B2B marketing strategy including all key components.
- Explain the techniques to conduct market analysis practices including market segmentation and targeting.
- Compare and contrast different perspectives that characterize the study of consumer behavior.
- Explain the role of IMC in the overall marketing program.

UNIT I INTRODUCTION 12
 Marketing – Definitions - Conceptual frame work – Marketing environment : Internal and External - Marketing interface with other functional areas – Production, Finance, Human Relations Management, Information System. Marketing in global environment – Prospects and Challenges.

UNIT II MARKETING STRATEGY 12
 Marketing strategy formulations – Key Drivers of Marketing Strategies - Strategies for Industrial Marketing – Consumer Marketing — Services marketing – Competitor analysis - Analysis of consumer and industrial markets – Strategic Marketing Mix components.

UNIT III MARKETING MIX DECISIONS 12
 Product planning and development – Product life cycle – New product Development and Management – Market Segmentation – Targeting and Positioning – Channel Management – Advertising and sales promotions – Pricing Objectives, Policies and methods.

UNIT IV BUYER BEHAVIOUR**12**

Understanding industrial and individual buyer behavior - Influencing factors – Buyer Behaviour Models – Online buyer behaviour - Building and measuring customer satisfaction – Customer relationships management – Customer acquisition, Retaining, Defection.

UNIT V MARKETING RESEARCH & TRENDS IN MARKETING**12**

Marketing Information System – Research Process – Concepts and applications : Product – Advertising – Promotion – Consumer Behaviour – Retail research – Customer driven organizations - Cause related marketing - Ethics in marketing –Online marketing trends.

TOTAL: 60 PERIODS**OUTCOMES:**

- knowledge of analytical skills in solving marketing related problems
- awareness of marketing management process

REFERENCES :

1. Philip Kotler and Kevin Lane Keller, Marketing Management, PHI 14th Edition, 2012
2. KS Chandrasekar, "Marketing management-Text and Cases", Tata McGraw Hill, First edition, 2010
3. Lamb, hair, Sharma, Mc Daniel– Marketing – An Innovative approach to learning and teaching-A south Asian perspective, Cengage Learning — 2012
4. Paul Baines, Chris Fill and Kelly Page, Marketing, Oxford University Press, 2nd Edition, 2011.
5. Micheal R.Czinkota & Masaaki Kotabe, Marketing Management, Cengage, 2000.

BA5211**DATA ANALYSIS AND BUSINESS MODELING****L T P C
0 0 4 2****OBJECTIVE :**

- to have hands-on experience on decision modeling.

[Business models studied in theory to be practiced using Spreadsheet / Analysis Software]

S.No.	Exp. No.	Details of experiments	Duration
		Name	
1	1	Descriptive Statistics	4
2	2	Hypothesis - Parametric	4
3	3	Hypothesis – Non-parametric	4
4	4	Correlation & Regression	4
5	5	Forecasting	4
6	-	Extended experiment – 1	4
7	6	Portfolio Selection	4
8	7	Risk Analysis & Sensitivity Analysis	4
9	8	Revenue Management	4
10	-	Extended experiment – 2	4
11	9	Transportation & Assignment	4
12	10	Networking Models	4
13	11	Queuing Theory	4
14	12	Inventory Models	4
15	-	Extended experiments – 3	4

- Spreadsheet Software and
- Data Analysis Tools

TOTAL: 60 PERIODS

OUTCOME

- Knowledge of spreadsheets and data analysis software for business modeling.

TEXTBOOKS

1. David M. Levine et al, "Statistics for Managers using MS Excel" (6th Edition) Pearson, 2010
2. David R. Anderson, et al, 'An Introduction to Management Sciences: Quantitative approaches to Decision Making, (13th edition) South-Western College Pub, 2011.
3. Hansa Lysander Manohar , " Data Analysis and Business Modelling using MS Excel ", PHI Learning private Ltd, 2017.
4. William J. Stevenson, Ceyhun Ozgur, 'Introduction to Management Science with Spreadsheet', Tata McGraw Hill, 2009.
5. Wayne L. Winston, Microsoft Excel 2010: Data Analysis & Business Modeling, 3rd edition, Microsoft Press, 2011.
6. Vikas Gupta, Comdex Business Accounting with Ms Excel, 2010 and Tally ERP 9.0 Course Kit, Wiley India, 2012
7. Kiran Pandya and Smriti Bulsari, SPSS in simple steps, Dreamtech, 2011.

BA5301

INTERNATIONAL BUSINESS MANAGEMENT

L T P C
3 0 0 3

OBJECTIVE:

- To familiarize the students to the basic concepts of international business management.

UNIT I INTRODUCTION

6

International Business –Definition – Internationalizing business-Advantages – factors causing globalization of business- international business environment – country attractiveness –Political, economic and cultural environment – Protection Vs liberalization of global business environment.

UNIT II INTERNATIONAL TRADE AND INVESTMENT

11

Promotion of global business – the role of GATT/WTO – multilateral trade negotiation and agreements – VIII & IX, round discussions and agreements – Challenges for global business – global trade and investment – theories of international trade and theories of international investment – Need for global competitiveness – Regional trade block – Types – Advantages and disadvantages – RTBs across the globe – brief history.

UNIT III INTERNATIONAL STRATEGIC MANAGEMENT

11

Strategic compulsions-Standardization Vs Differentiation – Strategic options – Global portfolio management- global entry strategy – different forms of international business – advantages - organizational issues of international business – organizational structures – controlling of international business – approaches to control – performance of global business- performance evaluation system.

UNIT IV PRODUCTION, MARKETING, FINANCIAL AND HUMAN RESOURCE MANAGEMENT OF GLOBAL BUSINESS

11

Global production –Location –scale of operations- cost of production – Make or Buy decisions – global supply chain issues – Quality considerations- Globalization of markets, marketing strategy – Challenges in product development , pricing, production and channel management- Investment decisions – economic- Political risk – sources of fund- exchange –rate risk and management – strategic orientation – selection of expatriate managers- Training and development – compensation.

UNIT V CONFLICT MANAGEMENT AND ETHICS IN INTERNATIONAL BUSINESS MANAGEMENT

6

Disadvantages of international business – Conflict in international business- Sources and types of conflict – Conflict resolutions – Negotiation – the role of international agencies –Ethical issues in international business – Ethical decision-making.

TOTAL: 45 PERIODS

OUTCOME:

- Students would be familiar with global business environment, global strategic management practices and get acquainted with functional domain practices. They would be familiar with conflicts situations and ethical issues in global business.

REFERENCES :

1. Charles W.I. Hill and Arun Kumar Jain, International Business, 6th edition, Tata McGraw Hill, New Delhi, 2010.
2. John D. Daniels and Lee H. Radebaugh, International Business, Pearson Education Asia, 12th Edition, New Delhi, 2010
3. K. Aswathappa, International Business, 6th Edition, Tata Mc Graw Hill, New Delhi, 2015.
4. Michael R. Czinkota, Ilkka A. Ronkainen and Michael H. Moffet, International Business, 7th Edition, Cengage Learning, New Delhi, 2010.
5. Rakesh Mohan Joshi, International Business, Oxford University Press, New Delhi, 2009.
6. Vyuptakesh Sharan, International Business, 3rd Edition, Pearson Education in South Asia, New Delhi, 2011.

BA5302

STRATEGIC MANAGEMENT

**L T P C
3 0 0 3**

OBJECTIVE:

- To learn the major initiatives taken by a company's top management on behalf of corporates, involving resources and performance in external environments. It entails specifying the organization's mission, vision and objectives, developing policies and plan to understand the analysis and implementation of strategic management in strategic business units.

UNIT I STRATEGY AND PROCESS

9

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

UNIT II COMPETITIVE ADVANTAGE

9

External Environment - Porter's Five Forces Model-Strategic Groups Competitive Changes during Industry Evolution-Globalisation and Industry Structure - National Context and Competitive advantage Resources- Capabilities and competencies–core competencies-Low cost and differentiation Generic Building Blocks of Competitive Advantage- Distinctive Competencies-Resources and Capabilities durability of competitive Advantage- Avoiding failures and sustaining competitive advantage-Case study.

UNIT III STRATEGIES

10

The generic strategic alternatives – Stability, Expansion, Retrenchment and Combination strategies - Business level strategy- Strategy in the Global Environment-Corporate Strategy-Vertical Integration-Diversification and Strategic Alliances- Building and Restructuring the corporation- Strategic analysis and choice - Environmental Threat and Opportunity Profile (ETOP) - Organizational Capability Profile - Strategic Advantage Profile - Corporate Portfolio Analysis - SWOT Analysis - GAP Analysis - Mc

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

UNIT IV STRATEGY IMPLEMENTATION & EVALUATION 9

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

UNIT V	OTHER STRATEGIC ISSUES	8
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Managing Technology and Innovation-Strategic issues for Non Profit organisations. New Business Models and strategies for Internet Economy-case study

TOTAL: 45 PERIODS

OUTCOME :

- This Course will create knowledge and understanding of management concepts principles and skills from a people, finance, marketing and organisational perspectives the development of appropriate organisational policies and strategies within a changing context to meet stakeholder interests information systems to learn from failure key tools and techniques for the analysis and design of information systems, including their human and organisational as well as technical aspects.

REFERENCES :

1. Hill. Strategic Management : An Integrated approach, 2009 Edition Wiley (2012).
2. John A.Parnell. Strategic Management, Theory and practice Biztantra (2012).
3. Azhar Kazmi, Strategic Management and Business Policy, 3rd Edition, Tata McGraw Hill, 2008
4. Adriaan H.Aberberg and Alison Rieple, Strategic Management Theory & Application, Oxford University Press, 2008.
5. Gupta, Gollakota and Srinivasan, Business Policy and Strategic Management – Concepts and Application, Prentice Hall of India, 2005.
6. Dr.Dharma Bir Singh, Strategic Management & Business Policy, KoGent Learning Solutions Inc., Wiley, 2012.
7. John Pearce, Richard Robinson and Amitha Mittal, Strategic Management, McGraw Hill, 12th Edition, 2012

FUNCTIONAL SPECIALIZATIONS

BA5001

BRAND MANAGEMENT

L T P C
3 0 0 3

OBJECTIVES :

- To understand the basic Principles of branding.
- To understand the key issues in crafting and evaluating brand strategies
- To improve the skills in delivering persuasive brand presentations.
- To evaluate brand extension and its contribution to parent brand
- To develop an understanding of brand equity and a range of performance related outcomes.

UNIT I INTRODUCTION

8

Basics Understanding of Brands – Definitions - Branding Concepts – Functions of Brand - Significance of Brands – Different Types of Brands – Co branding – Store brands.

UNIT II BRAND STRATEGIES

10

Strategic Brand Management process – Building a strong brand – Brand positioning – Establishing Brand values – Brand vision – Brand Elements – Branding for Global Markets – Competing with foreign brands.

UNIT III BRAND COMMUNICATIONS

8

Brand image Building – Brand Loyalty programmes – Brand Promotion Methods – Role of Brand ambassadors, celebrities – On line Brand Promotions.

UNIT IV BRAND EXTENSION

9

Brand Adoption Practices – Different type of brand extension – Factors influencing Decision for extension – Re-branding and re-launching.

UNIT V BRAND PERFORMANCE

10

Measuring Brand Performance – Brand Equity Management - Global Branding strategies - Brand Audit – Brand Equity Measurement – Brand Leverage -Role of Brand Managers– Branding challenges & opportunities.

TOTAL: 45 PERIODS

OUTCOMES :

- Have a solid understanding of the key 'branding' concepts, methods and tools used by marketing practitioners.
- Be able to more confidently engage in and contribute to 'brand building' projects, developments, and discussions.

REFERENCES :

1. Kevin Lane Keller, Strategic Brand Management: Building, Measuring and Managing Brand Equity, Pearson, 4th Edition, 2013.
2. Aker, David, Building Strong Brands, Simon and Schuster, 1995
3. Kapferer J.N, Strategic Brand Management, 4th edition, Kogan Press, 2008
4. Moorthi YLR, Brand Management – I edition, Vikas Publishing House 2001.

OBJECTIVES :

- To understand the concepts of consumer behaviour and its application in purchase decisions.
- To Analyse of the reasons and motives for consumer buying behaviour
- To analyse the relationship between psychological social and cultural drivers behind consumer behaviour and marketing
- To identify the dynamics of human behaviour and the basic factors that influence the consumers decision process.

UNIT I INTRODUCTION**9**

Concepts – Significance – Dimensions of Consumer Behavior – Application of knowledge of Consumer Behaviour in marketing decisions.

UNIT II CONSUMER BEHAVIOR MODELS**9**

Industrial and individual consumer behaviour models - Howard- Sheth, Engel – Kollat, Webster and wind Consumer Behaviour Models – Implications of the models on marketing decisions.

UNIT III INTERNAL INFLUENCES**9**

Psychological Influences on consumer behavior – motivation – perception – personality Learning and Attitude- Self Image and Life styles – Consumer expectation and satisfaction.

UNIT IV EXTERNAL INFLUENCES**9**

Socio-Cultural, Cross Culture - Family group – Reference group – Communication - Influences on Consumer behavior

UNIT V PURCHASE DECISION PROCESS**9**

High and low involvement - Pre-purchase and post-purchase behavior – Online purchase decision process – Diffusion of Innovation – Managing Dissonance - Emerging Issues.

TOTAL: 45 PERIODS**OUTCOMES :**

- Identify the major individual, social and cultural factors that affect consumers' decision making process;
- Explain and analyze the major stages which consumers usually go through when making a consumption-related decision
- Understand the essence of how consumers make decisions and assess the relevant implications for marketing practitioners

REFERENCES :

1. Leon G Schiffman, Joseph Wisemblit, S Ramesh Kumar , Consumer Behaviour, 11th edition, Pearson, 2015
2. Barry J.Babin, Eric G.Harris, Ashutosh Mohan, Consumer Behavior: A South Asian Perspective, Cengage Learning, Indian Edition, 6th Edition, 2016
3. P.C.Jain and Monika Bhatt., Consumer Behavior in Indian Context, S.Chand & Company, 2013.
4. Srabanti Mukherjee, Consumer behavior, Cengage Learning, 2012.
5. Assael, Consumer Behavior - A Strategic Approach, Biztranza, 2008
6. Dinesh kumar ,Consumer Behaviour, Oxford University Press,2015.

OBJECTIVE:

- To understand the need and importance of maintaining a good customer relationship.

UNIT I INTRODUCTION**9**

Definitions - Concepts and Context of relationship Management – Evolution - Transactional Vs Relationship Approach – CRM as a strategic marketing tool – CRM significance to the stakeholders.

UNIT II UNDERSTANDING CUSTOMERS**9**

Customer information Database – Customer Profile Analysis - Customer perception, Expectations analysis – Customer behavior in relationship perspectives; individual and group customer's - Customer life time value – Selection of Profitable customer segments.

UNIT III CRM STRUCTURES**9**

Elements of CRM – CRM Process – Strategies for Customer acquisition – Retention and Prevention of defection – Models of CRM – CRM road map for business applications.

UNIT IV CRM PLANNING AND IMPLEMENTATION**9**

Strategic CRM planning process – Implementation issues – CRM Tools- Analytical CRM – Operational CRM – Call center management – Role of CRM Managers.

UNIT V TRENDS IN CRM**9**

e- CRM Solutions – Data Warehousing – Data mining for CRM – an introduction to CRM software packages.

TOTAL: 45 PERIODS**OUTCOME :**

- To use strategic customer acquisition and retention techniques in CRM.

REFERENCES :

- G.Shainesh, Jagdish, N.Sheth, Customer Relationship Management A Strategic Prespective, Macmillan 2010
- Alok Kumar et al, Customer Relationship Management : Concepts and applications, Biztantra, 2008
- H.Peeru Mohamed and A.Sahadevan, Customer Relation Management, Vikas Publishing 2005.
- Jim Catheart, The Eight Competencies of Relationship selling, Macmillan India, 2005.
- Assel, Consumer Behavior, Cengage, 6th Edition.
- Kumar, Customer Relationship Management - A Database Approach, Wiley India, 2007.
- Francis Buttle, Customer Relationship Management : Concepts & Tools, Elsevier, 2004.
- Zikmund. Customer Relationship Management, Wiley 2012 ..

OBJECTIVE:

- This course introduces students to the basic concepts of advertising and sales promotion and how business organizations and other institutions carry out such activities.

UNIT I INTRODUCTION TO ADVERTISEMENT**9**

Concept –definition-scope-Objectives-functions-principles of advertisement – Social, Economic and Legal Implications of advertisements – setting advertisement objectives – Advertisement Agencies – Selection and remuneration – Advertisement campaigns – case studies.

UNIT II ADVERTISEMENT MEDIA**9**

Media plan – Type and choice criteria – Reach and frequency of advertisements – Cost of advertisements - related to sales – Media strategy and scheduling. 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 – Testing validity and Reliability of ads – Measuring impact of advertisements – case studies.

UNIT III SALES PROMOTION**9**

Scope and role of sale promotion – Definition – Objectives of sales promotion - sales promotion techniques – Trade oriented and consumer oriented. Sales promotion – Requirement identification – Designing of sales promotion campaign – Involvement of salesmen and dealers – Out sourcing sales promotion national and international promotion strategies – Integrated promotion – Coordination within the various promotion techniques – Online sales promotions- case studies.

UNIT IV PERSONAL SELLING**9**

Introduction – Meaning – Functions- Personal selling process – Evaluation – Compensation – Motivation- Territory Management – Sales Report Preparation and Presentation- Ethical Issues

UNIT V PUBLICITY AND PUBLIC RELATIONS**9**

Introduction – Meaning – Objectives –Scope-Functions-integrating PR in to Promotional Mix-Marketing Public Relation function- Process of Public Relations-advantages and disadvantages of PR-Measuring the Effectiveness of PR- PR tools and techniques. Difference between Marketing, PR and Publicity -- Social publicity – Web Publicity and Social media – Publicity Campaigns

TOTAL: 45 PERIODS**OUTCOME :**

- Insight into the importance of advertising and sales promotion campaigns planning and objective setting in relation to consumer decision making processes.

REFERENCES :

- George E Belch and Michel A Belch, Advertising & Promotion, Tata McGraw Hill, 10th edition, 2014
- Wells, Moriarty & Burnett, Advertising, Principles & Practice, Pearson Education, 7th Edition, 2007.
- Kenneth Clow. Donald Baack, Integrated Advertisements, Promotion and Marketing communication, Prentice Hall of India, New Delhi, 3rd Edition, 2006.
- Terence A. Shimp and J.Craig Andrews, Advertising Promotion and other aspects of Integrated Marketing Communications, CENGAGE Learning, 9th edition, 2016
- S. H. H. Kazmi and Satish K Batra, Advertising & Sales Promotion, Excel Books, New Delhi, 3rd Revised edition edition, 2008.
- Julian Cummings, Sales Promotion: How to Create, Implement and Integrate Campaigns that Really Work, Kogan Page, London, Fifth Edition Edition ,2010.
- Jaishri Jeffhwaney, Advertising Management, Oxford University Press, 2nd Edition, 2013.

OBJECTIVE:

- To understand the concepts of effective retailing

UNIT I INTRODUCTION**9**

An overview of Global Retailing – Challenges and opportunities – Retail trends in India – Socio economic and technological Influences on retail management – Government of India policy implications on retails.

UNIT II RETAIL FORMATS**9**

Organized and unorganized formats – Different organized retail formats – Characteristics of each format – Emerging trends in retail formats – MNC's role in organized retail formats.

UNIT III RETAILING DECISIONS**9**

Choice of retail locations - internal and external atmospherics – Positioning of retail shops – Building retail store Image - Retail service quality management – Retail Supply Chain Management – Retail Pricing Decisions. Mercandising and category management – buying.

UNIT IV RETAIL SHOP MANAGEMENT**9**

Visual Merchandise Management – Space Management – Retail Inventory Management – Retail accounting and audits - Retail store brands – Retail advertising and promotions – Retail Management Information Systems - Online retail – Emerging trends .

UNIT V RETAIL SHOPPER BEHAVIOUR**9**

Understanding of Retail shopper behavior – Shopper Profile Analysis – Shopping Decision Process - Factors influencing retail shopper behavior – Complaints Management - Retail sales force Management – Challenges in Retailing in India.

TOTAL: 45 PERIODS**OUTCOME:**

- To manage the retail chains and understand the retail customer's behavior

REFERENCES :

1. Michael Havy ,Baston, Aweitz and Ajay Pandit, Retail Management, Tata Mcgraw Hill, Sixth Edition, 2007
2. J K Nayak, Prakash C.Dash, Retail Management, Cengage, 2017
3. Dr.Harjit Singh, Retail Management A Global Perspective, S.Chand Publishing, 3rd Edition,2014
4. Patrick M. Dunne and Robert F Lusch, Retailing, Cengage, 8th edition, 2013.
5. Chetan Bajaj, Rajnish Tow and Nidhi V. Srivatsava, Retail Management, Oxford University Press, 3rd Edition 2016.
6. Swapna Pradhan, Retail Management -Text and Cases, Tata McGraw Hill, 4th Edition, 2012.
7. Ramkrishnan and Y.R.Srinivasan, Indian Retailing Text and Cases, Oxford University Press, 2008

BA5006

SERVICES MARKETING

L T P C
3 0 0 3

OBJECTIVE:

- To understand the meaning of services and the significance of marketing the services.

UNIT I INTRODUCTION

9

Definition – Service Economy – Evolution and growth of service sector – Nature and Scope of Services – Unique characteristics of services - Challenges and issues in Services Marketing.

UNIT II SERVICE MARKETING OPPORTUNITIES

9

Assessing service market potential - Classification of services – Expanded marketing mix – Service marketing – Environment and trends – Service market segmentation, targeting and positioning.

UNIT III SERVICE DESIGN AND DEVELOPMENT

9

Service Life Cycle – New service development – Service Blue Printing – GAP model of service quality – Measuring service quality – SERVQUAL – Service Quality function development.

UNIT IV SERVICE DELIVERY AND PROMOTION

9

Positioning of services – Designing service delivery System, Service Channel – Pricing of services, methods – Service marketing triangle - Integrated Service marketing communication.

UNIT V SERVICE STRATEGIES

9

Service Marketing Strategies for health – Hospitality – Tourism – Financial – Logistics - Educational – Entertainment & public utility Information technique Services

TOTAL: 45 PERIODS

OUTCOME:

- Will be able to apply the concepts of services marketing in promoting services.

REFERENCES :

1. Christopher H. Lovelock and Jochen Wirtz, Services Marketing, Pearson Education, New Delhi, 7th edition, 2011.
2. Hoffman, Marketing of Services, Cengage, 4th Edition, 2010.
3. Kenneth E Clow, et al, Services Marketing Operation Management and Strategy, Biztantra, 2nd Edition, New Delhi, 2004.
4. Valarie Zeithaml et al, Services Marketing, 5th International Edition, Tata McGraw Hill, 2007.
5. Gronroos, Service Management and Marketing –Wiley India, 3rd Edition, 2009.

BA5007

SOCIAL MARKETING

L T P C
3 0 0 3

OBJECTIVE:

- To enhance Competiveness in Social Marketing by ethical values and social media in Marketing.

UNIT I INTRODUCTION

9

Social marketing - Definition - Scope and concept - Evolution of Social marketing - Need for Social marketing - A comparative study between Commercial and Social marketing - Use of market research - social change tools - Factors influencing Social marketing - Challenges and opportunities.

9

Segmentation - Motives and benefits - Sheth's and Frazier's attitude - behavior segmentation - Stage approach to segmentation - Selecting target audiences - Cross cultural targeting - cultural and individual tailoring.

9

Role of media in social marketing campaigns - planning and developing Social media campaigning – Campaign vs Programme - Programme planning models – conceptual model Lawrence Green's PRECEDE-PROCEED model.

9

9

Social Media marketing - Importance - Big Brands & Small business - E mail marketing -Social Media Tools –Marketing with Social network sites, blogging, micro blogging, podcasting with Podomatic

- Applying Ethical Principles in Social Marketing through advanced marketing medias

1. Rob Donovan & Nadine Henley. (2011). Principles and Practice of Social Marketing-an international perspective. Cambridge University Press.
2. Kotler, P., Roberto, N., & Lee, N. (2008). Social Marketing – Influencing Behaviors for Good. (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
3. French, J., Blair-Stevens, C., McVey, D., & Merritt, R. Social Marketing and Public Health. Oxford, UK: University Press 2010.
4. Hastings, G. Social Marketing: Why should the Devil Have All the Best Tunes, Routledge 2013
5. Social marketing in the 21st Century- Alan R. Andreasen- sage Publication, 2012

OBJECTIVES:

- Grasp how banks raise their sources and how they deploy it and manage the associated risks
- Understand e-banking and the threats that go with it.

UNIT I OVERVIEW OF INDIAN BANKING SYSTEM 9

Overview of Indian Banking System, Functions of banks, key Acts governing the functioning of Indian banking system – RBI Act 1934, Negotiable Instruments Act 1881, Banking Regulations Act 1948 – Rights and obligations of a banker, Overview of Financial statement of banks – Balance sheet and Income Statement.

UNIT II SOURCES AND APPLICATION OF BANK FUNDS 9

Capital adequacy, Deposits and non-deposit sources, Designing of deposit schemes and pricing of deposit services, application of bank funds – Investments and Lending functions, Types of lending – Fund based, non-fund based, asset based – Different types of loans and their features, Major components of a typical loan policy document, Steps involved in Credit analysis, Credit delivery and administration, Pricing of loans, Customer profitability analysis.

UNIT II CREDIT MONITORING AND RISK MANAGEMENT 9

Need for credit monitoring, Signals of borrowers' financial sickness, Financial distress prediction models – Rehabilitation process, Risk management – Interest rate, liquidity, forex, credit, market, operational and solvency risks – risk measurement process and mitigation, Basic understanding of NPAs and ALM.

UNIT IV MERGERS, DIVERSIFICATION AND PERFORMANCE EVALUATION 9

Mergers and Diversification of banks into securities market, underwriting, Mutual funds and Insurance business, Risks associated therewith. Performance analysis of banks – background factors, ratio analysis and CAMELS.

UNIT V HIGH TECH E-BANKING 9

Payment system in India – Paper based, e-payments – Electronic banking – advantages – Plastic money, E-money – Forecasting of cash demand at ATMs – Security threats in e-banking and RBI's initiatives.

TOTAL: 45 PERIODS**OUTCOME:**

- Price various types of loans proposed by banks to various prospective borrowers with different risk profiles and evaluate the performance of banks

REFERENCES :

1. Padmalatha Suresh and Justin Paul, "Management of Banking and Financial Services, Pearson, Delhi, 2012.
2. Meera Sharma, "Management of Financial Institutions – with emphasis on Bank and Risk Management", PHI Learning Pvt. Ltd., New Delhi 2010.
3. Peter S. Rose and Sylvia C. and Hudgins, "Bank Management and Financial Services", Tata McGraw Hill, New Delhi, 2012.
4. Madura, Financial Institutions & Markets, 10th edition, Cengage, 2016.

OBJECTIVES :

Student will acquire

- Nuances involved in short term corporate financing
- Good ethical practices

UNIT I INDUSTRIAL FINANCE**9**

Indian Capital Market – Basic problem of Industrial Finance in India. Equity – Debenture financing – Guidelines from SEBI, advantages and disadvantages and cost of various sources of Finance – Finance from international sources, financing of exports – role of EXIM bank and commercial banks.– Finance for rehabilitation of sick units.

UNIT II SHORT TERM-WORKING CAPITAL FINANCE**6**

Estimating working capital requirements – Approach adopted by Commercial banks, Commercial paper- Public deposits and inter corporate investments.

UNIT III ADVANCED FINANCIAL MANAGEMENT**12**

Appraisal of Risky Investments - certainty equivalent of cash flows and risk adjusted discount rate - risk analysis in the context of DCF methods using Probability information - nature of cash flows - Sensitivity analysis - Simulation and investment decision, Decision tree approach in investment decisions.

UNIT IV FINANCING DECISION**10**

Simulation and financing decision - cash inadequacy and cash insolvency - determining the probability of cash insolvency- Financing decision in the Context of option pricing model and agency costs- Inter-dependence of investment- financing and Dividend decisions.

UNIT V CORPORATE GOVERNANCE**8**

Corporate Governance - SEBI Guidelines- Corporate Disasters and Ethics-Corporate Social Responsibility- Stakeholders and Ethics- Ethics, Managers and Professionalism.

TOTAL: 45 PERIODS**OUTCOME :**

- Good ethical corporate manager

REFERENCES :

1. Richard A.Brealey, Stewart C.Myers and Mohanthy, Principles of Corporate Finance, Tata McGraw Hill, 9th Edition, 2011
2. I.M.Pandey, Financial Management, Vikas Publishing House Pvt., Ltd., 12th Edition, 2012.
3. Brigham and Ehrhardt, Corporate Finance - A focused Approach, Cengage Learning, 2nd Edition, 2011.
4. M.Y Khan, Indian Financial System, Tata McGraw Hill, 6th Edition, 2011
5. Smart, Megginson, and Gitman, Corporate Finance, 2nd Edition, 2011.
6. Krishnamurthy and Viswanathan, Advanced Corporate Finance, PHI Learning, 2011.
7. Website of SEBI
8. Besley, Brigham, Parasuraman, Corporate Finance, Cengage Learning, 2015
9. Michael C.Ehrhardt, Eugene F.Brigham, Corporate Finance – A focused approach, Cengage Learning, 2011.
10. Madura, International Corporate Finance, 10th edition, Cengage Learning, 2014.

OBJECTIVE :

- To understand the nuances involved in derivatives and to understand the basic operational mechanisms in derivatives.

UNIT I INTRODUCTION**9**

Derivatives – Definition – Types – Forward Contracts – Futures Contracts – Options – Swaps – Differences between Cash and Future Markets – Types of Traders – OTC and Exchange Traded Securities – Types of Settlement – Uses and Advantages of Derivatives – Risks in Derivatives.

UNIT II FUTURES CONTRACT**9**

Specifications of Futures Contract - Margin Requirements – Marking to Market – Hedging uses Futures – Types of Futures Contracts – Securities, Stock Index Futures, Currencies and Commodities – Delivery Options – Relationship between Future Prices, Forward Prices and Spot Prices.

UNIT III OPTIONS**9**

Definition – Exchange Traded Options, OTC Options – Specifications of Options – Call and Put Options – American and European Options – Intrinsic Value and Time Value of Options – Option payoff, options on Securities, Stock Indices, Currencies and Futures – Options pricing models – Differences between future and Option contracts.

UNIT IV SWAPS**9**

Definition of SWAP – Interest Rate SWAP – Currency SWAP – Role of Financial Intermediary – Warehousing – Valuation of Interest rate SWAPs and Currency SWAPs Bonds and FRNs – Credit Risk.

UNIT V DERIVATIVES IN INDIA**9**

Evolution of Derivatives Market in India – Regulations - Framework – Exchange Trading in Derivatives – Commodity Futures – Contract Terminology and Specifications for Stock Options and Index Options in NSE – Contract Terminology and specifications for stock futures and Index futures in NSE – Contract Terminology and Specifications for Interest Rate Derivatives.

TOTAL: 45 PERIODS**OUTCOME :**

- This course aims at providing an in-depth understanding of financial derivatives in terms of concepts, structure, instruments and trading strategies for profit and risk management.

REFERENCES :

- David Dubofsky – ‘Option and Financial Futures – Valuation and Uses, McGraw Hill International Edition.
- Don M. Chance, Robert Brooks, An Introduction to Derivatives and Risk Management, 9th edition, Cengage, 2015.
- John. C. Hull, Options, Futures and Other Derivative Securities’, PHI Learning, 9th Edition, 2012
- Keith Redhead, ‘Financial Derivatives – An Introduction to Futures, Forwards, Options and SWAPs’,– PHI Learning, 2011.
- S. L. Gupta, Financial Derivatives- Theory, Concepts and Practice, Prentice Hall of India, 2011.
- Stulz, Risk Management and Derivatives, Cengage, 2nd Edition, 2011.
- Varma, Derivatives and Risk Management, 2nd Edition, 2011.
- Website of NSE, BSE.

OBJECTIVES :

To enable student

- Understand the modes of issuing securities
- Acquire financial evaluation technique of leasing and hire purchase

UNIT I MERCHANT BANKING**5**

Introduction – An Over view of Indian Financial System – Merchant Banking in India – Recent Developments and Challenges ahead – merchant banking services offered by banks – NBFC'S offering merchant banking – Banking system – types of banks – payment banking -Legal and Regulatory Framework – Relevant Provisions of Companies Act- SERA- SEBI guidelines- FEMA, etc. - Relation with Stock Exchanges and OTCEI.

UNIT II ISSUE MANAGEMENT**12**

Role of Merchant Banker in Appraisal of Projects, Designing Capital Structure and Instruments – Issue Pricing – Book Building – Preparation of Prospectus Selection of Bankers, Advertising Consultants, etc. - Role of Registrars –Bankers to the Issue, Underwriters, and Brokers. – Offer for Sale – Green Shoe Option – E-IPO, Private Placement – Bought out Deals – Placement with FIs, MFs, FIIs, etc. Off - Shore Issues. – Issue Marketing – Advertising Strategies – NRI Marketing – Post Issue Activities.

UNIT III OTHER FEE BASED SERVICES**10**

Mergers and Acquisitions – Portfolio Management Services – Credit Syndication – Credit Rating – Mutual Funds - Business Valuation.

UNIT IV FUND BASED FINANCIAL SERVICES**10**

Leasing and Hire Purchasing – Basics of Leasing and Hire purchasing – Financial Evaluation.

UNIT V OTHER FUND BASED FINANCIAL SERVICES**8**

Consumer Credit – Credit Cards – Real Estate Financing – Bills Discounting – factoring and Forfeiting – Venture Capital - venture debt funds – start up financing.

TOTAL: 45 PERIODS**OUTCOME**

- Good knowledge on merchant banking activities

REFERENCES :

1. M.Y.Khan, Financial Services, Tata McGraw-Hill, 12th Edition, 2012
2. Nalini Prava Tripathy, Financial Services, PHI Learning, 2011.
3. Machiraju, Indian Financial System, Vikas Publishing House, 2nd Edition, 2010.
4. J.C.Verma, A Manual of Merchant Banking, Bharath Publishing House, New Delhi,
5. Varshney P.N. & Mittal D.K., Indian Financial System, Sultan Chand & Sons, New Delhi.
6. Sasidharan, Financial Services and System, Tata McGraw Hill, New Delhi, 2nd Edition, 2011.
7. Website of SEBI
8. Madura, Financial Institutions & Markets, 10th edition, Cengage, 2016.

OBJECTIVES :

Enables student to

- Understand the nuances of stock market operations.
- Understand the techniques involved in deciding upon purchase or sale of securities.

UNIT I INVESTMENT SETTING**8**

Financial and economic meaning of Investment – Characteristics and objectives of Investment – Types of Investment – Investment alternatives – Choice and Evaluation – Risk and return concepts.

UNIT II SECURITIES MARKETS**10**

Financial Market - Segments – Types - - Participants in financial Market – Regulatory Environment, Primary Market – Methods of floating new issues, Book building – Role of primary market – Regulation of primary market, Stock exchanges in India – BSE, OTCEI , NSE, ISE, and Regulations of stock exchanges – Trading system in stock exchanges –SEBI.

UNIT III FUNDAMENTAL ANALYSIS**9**

Economic Analysis – Economic forecasting and stock Investment Decisions – Forecasting techniques. Industry Analysis : Industry classification, Industry life cycle – Company Analysis Measuring Earnings – Forecasting Earnings – Applied Valuation Techniques – Graham and Dodds investor ratios.

UNIT IV TECHNICAL ANALYSIS**9**

Fundamental Analysis Vs Technical Analysis – Charting methods – Market Indicators. Trend – Trend reversals – Patterns - Moving Average – Exponential moving Average – Oscillators – Market Indicators – Efficient Market theory.

UNIT V PORTFOLIO MANAGEMENT**9**

Portfolio analysis – Portfolio Selection –Capital Asset Pricing model – Portfolio Revision Portfolio Evaluation – Mutual Funds.

TOTAL: 45 PERIODS**OUTCOME**

- Become a good investment analyst

REFERENCES :

1. Donald E.Fischer & Ronald J.Jordan, Security Analysis & Portfolio Management, PHI Learning., New Delhi, 8th edition, 2011.
2. Prasannachandra, Investment analysis and Portfolio Management, Tata McGraw Hill, 2011.
3. Reilly & Brown, Investment Analysis and Portfolio Management, Cengage, 10th edition, 2016.
4. S. Kevin , Securities Analysis and Portfolio Management , PHI Learning , 2012.

OBJECTIVE :

- Enable students to acquire techniques of evaluating strategic investment decisions understand the causes of prediction modes of financial distress.

UNIT I INVESTMENT DECISIONS**9**

Project Investment Management Vs Project Management – Introduction to profitable projects – evaluation of Investment opportunities – Investment decisions under conditions of uncertainty – Risk analysis in Investment decision – Types of investments and disinvestments.

UNIT II CRITICAL ANALYSIS OF APPRAISAL TECHNIQUES**10**

Significance of Information and data bank in project selections – Investment decisions under capital constraints – capital rationing, Portfolio – Portfolio risk and diversified projects.

UNIT III STRATEGIC ANALYSIS OF SELECTED INVESTMENT DECISIONS**10**

Lease financing – Lease Vs Buy decision – Hire Purchase and installment decision – Hire Purchase Vs Lease Decision – Mergers and acquisition – Cash Vs Equity for mergers.

UNIT IV FINANCING DECISIONS**8**

Capital Structure – Capital structure theories – Capital structure Planning in Practice.

UNIT V FINANCIAL DISTRESS**8**

Consequences, Issues, Bankruptcy, Settlements, reorganization and Liquidation in bankruptcy.

TOTAL: 45 PERIODS**OUTCOME :**

- Possess good knowledge in techniques for making strategic investment decision and tackling financial distress

REFERENCES:

1. Prasanna Chandra, Financial Management, Tata McGraw Hill, 9th Edition, 2012.
2. Prasanna Chandra, Projects : Planning, Analysis, Financing Implementation and Review, TMH, New Delhi, 2011.
3. Bodie, Kane, Marcus: Investment, Tata McGraw Hill, New Delhi, 2010.
4. Brigham E. F & Houston J.F. Financial Management, Thomson Publications, 9 th edition, 2010.
5. M. Pandey, Financial Management, Vikas Publishing House, 10th edition, 2010.
6. M. Y. Khan and P. K. Jain, Financial Management Text and Problems, Tata McGraw Hill Publishing Co, 2011.
7. Website of IDBI Related to Project Finance.

OBJECTIVES :

To enable student

- Understand export import finance and forex management
- Understand the documentation involved in international trade

UNIT I	INTERNATIONAL TRADE	9
International Trade – Meaning and Benefits – Basis of International Trade –Foreign Trade and Economic Growth – Balance of Trade – Balance of Payment – Current Trends in India – Barriers to International Trade – WTO – Indian EXIM Policy.		
UNIT II	EXPORT AND IMPORT FINANCE	9
Special need for Finance in International Trade – INCO Terms (FOB, CIF, etc.,) – Payment Terms – Letters of Credit – Pre Shipment and Post Shipment Finance – Forfaiting – Deferred Payment Terms – EXIM Bank – ECGC and its schemes Import Licensing – Financing methods for import of Capital goods		
UNIT III	FOREX MANAGEMENT	9
Foreign Exchange Markets – Spot Prices and Forward Prices – Factors influencing Exchange rates – The effects of Exchange rates in Foreign Trade – Tools for hedging against Exchange rate variations – Forward, Futures and Currency options – FEMA – Determination of Foreign Exchange rate and Forecasting.		
UNIT IV	DOCUMENTATION IN INTERNATIONAL TRADE	9
Export Trade Documents: Financial Documents – Bill of Exchange- Type- Commercial Documents - Proforma, Commercial, Consular, Customs, Legalized Invoice, Certificate of Origin Certificate Value, Packing List, Weight Certificate, Certificate of Analysis and Quality, Certificate of Inspection, Health certificate. Transport Documents -Bill of Lading, Airway Bill, Postal Receipt, Multimodal Transport Document. Risk Covering Document: Insurance Policy, Insurance Cover Note. Official Document: Export Declaration Forms, GR Form, PP Form, COD Form, Softer Forms, Export Certification, GSPS – UPCDC Norms.		
UNIT V	EXPORT PROMOTION SCHEMES	9
Government Organizations Promoting Exports – Export Incentives : Duty Exemption – IT Concession – Marketing Assistance – EPCG, DEPB – Advance License – Other efforts I Export Promotion – EPZ – EQU – SEZ and Export House.		

TOTAL: 45 PERIODS

OUTCOME

- Possess good knowledge on international trade and the documentation involved in it.

TEXT BOOKS

1. Apte P.G., International Financial Management, Tata McGraw Hill, 2011.
2. Jeff Madura, International Corporate Finance, Cengage Learning, 9th Edition, 2011.

REFERENCES

1. Alan C. Shapiro, Multinational Financial Management, PHI Learning, 5th Edition, 2010.
2. Eun and Resnik, International Financial Management, Tata McGraw Hill, 5th Edition, 2011.
3. Website of Indian Government on EXIM policy

OBJECTIVE:

- To develop and strengthen entrepreneurial quality and motivation in students. To impart basic entrepreneurial skills and understandings to run a business efficiently and effectively.

UNIT I ENTREPRENEURIAL COMPETENCE**6**

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

UNIT II ENTREPRENEURIAL ENVIRONMENT**12**

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

UNIT III BUSINESS PLAN PREPARATION**12**

Sources of Product for Business - Prefeasibility Study - Criteria for Selection of Product - Ownership - Capital - Budgeting Project Profile Preparation - Matching Entrepreneur with the Project - Feasibility Report Preparation and Evaluation Criteria.

UNIT IV LAUNCHING OF SMALL BUSINESS**10**

Finance and Human Resource Mobilization Operations Planning - Market and Channel Selection - Growth Strategies - Product Launching – Incubation, Venture capital, IT startups.

UNIT V MANAGEMENT OF SMALL BUSINESS**5**

Monitoring and Evaluation of Business - Preventing Sickness and Rehabilitation of Business Units- Effective Management of small Business.

TOTAL: 45 PERIODS**OUTCOME:**

- Students will gain knowledge and skills needed to run a business.

REFERENCES:

1. Hisrich, Entrepreneurship, Edition 9, Tata McGraw Hill, New Delhi, 2014
2. S.S.Khanka, Entrepreneurial Development, S.Chand and Company Limited, New Delhi, (Revised Edition) 2013.
3. Mathew Manimala, Entrepreneurship Theory at the Crossroads, Paradigms & Praxis, Biztrantra, 2nd Edition, 2005
4. Prasanna Chandra, Projects – Planning, Analysis, Selection, Implementation and Reviews, Tata McGraw-Hill, 1996.
5. P.Saravanel, Entrepreneurial Development, Ess Pee kay Publishing House, Chennai
6. 1997.
7. Arya Kumar. Entrepreneurship. Pearson, 2012.
8. Donald F Kuratko, T.V Rao. Entrepreneurship: A South Asian perspective. Cengage, 2012

OBJECTIVE:

- To explore contemporary knowledge and gain a conceptual understanding of industrial relations.

UNIT I INDUSTRIAL RELATIONS**7**

Concepts – Importance – Industrial Relations problems in the Public Sector – Growth of Trade Unions – Codes of conduct.

UNIT II INDUSTRIAL CONFLICTS**12**

Disputes – Impact – Causes – Strikes – Prevention – Industrial Peace – Government Machinery – Conciliation – Arbitration – Adjudication.

UNIT III LABOUR WELFARE**8**

Concept – Objectives – Scope – Need – Voluntary Welfare Measures – Statutory Welfare Measures – Labour – Welfare Funds – Education and Training Schemes.

UNIT IV INDUSTRIAL SAFETY**9**

Causes of Accidents – Prevention – Safety Provisions – Industrial Health and Hygiene – Importance – Problems – Occupational Hazards – Diseases – Psychological problems – Counseling – Statutory Provisions.

UNIT V WELFARE OF SPECIAL CATEGORIES OF LABOUR**9**

Child Labour – Female Labour – Contract Labour – Construction Labour – Agricultural Labour – Differently abled Labour –BPO & KPO Labour - Social Assistance – Social Security – Implications.

TOTAL: 45 PERIODS**OUTCOME:**

- Students will know how to resolve industrial relations and human relations problems and promote welfare of industrial labour.

REFERENCES :

- Mamoria C.B., Sathish Mamoria, Gankar, Dynamics of Industrial Relations, Himalaya Publishing House, New Delhi, 2012.
- Arun Monappa, Ranjeet Nambudiri, Patturaja Selvaraj. Industrial relations & Labour Laws. Tata McGraw Hill. 2012.
- Ratna Sen, Industrial Relations in India, Shifting Paradigms, Macmillan India Ltd., New Delhi, 2007.
- C.S.Venkata Ratnam, Globalisation and Labour Management Relations, Response Books, 2007.
- Srivastava, Industrial Relations and Labour laws, Vikas, 2007.
- P.N.Singh, Neeraj Kumar. Employee relations Management. Pearson. 2011.
- P.R.N Sinha, Indu Bala Sinha, Seema Priyadarshini Shekhar. Industrial Relations, Trade Unions and Labour Legislation. Pearson. 2004

OBJECTIVE:

- To have a broad understanding of the legal principles governing the employment relationship at individual and collective level.
- To familiarise the students to the practical problems inherent in the implementation of labour statutes.

Contained in the following acts are to be studied.

	Periods
1. The Factories Act, 1948	3
2. The Trade Unions Act, 1926	4
3. The Payment of Wages Act, 1936	3
4. The Minimum Wages Act, 1948	2
5. The Industrial Disputes Act, 1947	5
6. The Workmen's Compensation Act, 1923	2
7. The Payment of Gratuity Act, 1972	3
8. The Payment of Bonus Act, 1965	3
9. The Employee's Provident Fund & Misc. Act, 1952	3
10. The Employees State Insurance Act, 1948	4
11. The Industrial Employment (Standing Orders) Act, 1946	3
12. The Apprentices Act, 1961	2
13. The Equal Remuneration Act, 1976	2
14. The Maternity Benefit Act, 1961	2
15. Contract Labour Regulations and Abolition Act, 1970	2
16. The Child Labour Prevention and Regulation Act, 1986	2

TOTAL: 45 PERIODS

OUTCOMES:

- To appreciate the application of labour laws.
- Legal Provision relating to
 - a) Wages
 - b) Working Conditions and Labour Welfare
 - c) Industrial Relations
 - d) Social Security

REFERENCES :

1. P.K. Padhi, Industrial Laws, PHI, 2008.
2. Kapoor N. D , Elements of Mercantile Law, Sultan Chand, 2008
3. Tax Mann, Labour Laws, 2008.
4. D. R. N. Sinha, Indu Balasinha & Semma Priyadarshini Shekar, Industrial Relation, Trade unions and Labour Legislation, 2004.
5. Arun Monappa, Ranjeet Nambudiri, Patturaja Selvaraj. Industrial relations & Labour Laws. Tata McGraw Hill. 2012
6. Srivastava, Industrial Relations and Labour laws, Vikas, 2007.
7. Respective Bare Acts.

OBJECTIVE:

- To examine managerial styles in terms of concern for production and concern for people. To assess different systems of management and relate these systems to organisational characteristics.

UNIT I DEFINING THE MANAGERIAL JOB**8**

Descriptive Dimensions of Managerial Jobs – Methods – Model – Time Dimensions in Managerial Jobs – Effective and Ineffective Job behaviour – Functional and level differences in Managerial Job behaviour.

UNIT II DESIGNING THE MANAGERIAL JOB**12**

Identifying Managerial Talent – Selection and Recruitment – Managerial Skills Development – Pay and Rewards – Managerial Motivation – Effective Management Criteria – Performance Appraisal Measures – Balanced Scorecard - Feedback – Career Management – Current Practices.

UNIT III THE CONCEPT OF MANAGERIAL EFFECTIVENESS**7**

Definition – The person, process, product approaches – Bridging the Gap – Measuring Managerial Effectiveness – Current Industrial and Government practices in the Management of Managerial Effectiveness- the Effective Manager as an Optimizer.

UNIT IV ENVIRONMENTAL ISSUES IN MANAGERIAL EFFECTIVENESS**8**

Organisational Processes – Organisational Climate – Leader – Group Influences – Job Challenge – Competition – Managerial Styles.

UNIT V DEVELOPING THE WINNING EDGE**10**

Organisational and Managerial Efforts – Self Development – Negotiation Skills – Development of the Competitive Spirit – Knowledge Management – Fostering Creativity and innovation.

TOTAL:45 PERIODS**OUTCOME:**

- Students will gain knowledge about appropriate style of managerial behaviour.

REFERENCES:

- Peter Drucker, Management, Harper Row, 2006.
- Milkovich and Newman, Compensation, McGraw-Hill International, 2013.
- Blanchard and Thacker, Effective Training Systems, Strategies and Practices Pearson 2012.
- Dubrin, Leadership, Research Findings, Practices & Skills, Biztantra, 2015.
- Joe Tidd , John Bessant, Keith Pavitt , Managing Innovation ,Wiley 3rd edition,2006.
- T.V.Rao,Appraising and Developing Managerial Performance, Excel Books,2002.
- R.M.Omkar, Personality Development and Career Management, S.Chand 1stedition,2008.
- Richard L.Daft, Leadership, Cengage, 1 st Indian Reprint 2008.

OBJECTIVE:

- To learn how an organization can be designed and developed to deal with the challenges from environment, technology, and its own processes.

UNIT I ORGANISATION & ITS ENVIRONMENT**8**

Meaning of Organisation – Need for existence - Organisational Effectiveness – Creation of Value – Measuring Organisational Effectiveness – External Resources Approach, Internal Systems Approach and Technical approach - HR implications.

UNIT II ORGANIZATIONAL DESIGN**15**

Organizational Design – Determinants – Components – Types - Basic Challenges of design – Differentiation, Integration, Centralization, Decentralization, Standardization, Mutual adjustment- Mechanistic and Organic Structures- Technological and Environmental Impacts on Design- Importance of Design – Success and Failures in design - Implications for Managers.

UNIT III ORGANISATIONAL CULTURE**6**

Understanding Culture – Strong and Weak Cultures – Types of Cultures – Importance of Culture - Creating and Sustaining Culture - Culture and Strategy - Implications for practicing Managers.

UNIT IV ORGANISATIONAL CHANGE**6**

Meaning – Forces for Change - Resistance to Change – Types and forms of change – Evolutionary and Revolutionary change – Change process -Organisation Development – HR functions and Strategic Change Management - Implications for practicing Managers.

UNIT V ORGANISATION EVOLUTION AND SUSTENANCE**10**

Organizational life cycle – Models of transformation – Models of Organizational Decision making – Organizational Learning – Innovation, Intrapreneurship and Creativity-HR implications.

TOTAL: 45 PERIODS**OUTCOME:**

- Students will be able to analyze organizations more accurately and deeply by applying organization theory.

REFERENCES:

1. Thomson G. Cummings and Christopher G. Worley, Organisational development and Change, Cengage, 9th edition 2011
2. Robbins Organisation Theory; Structure Design & Applications, Prentice Hall of India, 2009.
3. Bhupen Srivastava, Organisational Design and Development: Concepts application, Biztantra , 2010.
4. Robert A Paton, James Mc Calman, Change Management, A guide to effective implementation, Response Books, 2012.
5. Adrian Thorn Hill, Phil Lewis, Mike Mill more and Mark Saunders, Managing Change -A Human Resource Strategy Approach, Wiley, 2010.
6. Gareth R.Jones, Organisational Theory, Design & Change, Pearson Education, 6th Edition 2011.
7. Richard L. Daft, Understanding theory & Design of Organisations, Cengage, Western, 10th Edition 2012.

OBJECTIVE:

- To help students understand the transformation in the role of HR functions from being a support function to strategic function.

UNIT I HUMAN RESOURCE DEVELOPMENT**10**

Meaning – Strategic framework for HRM and HRD – Vision, Mission and Values – Importance – Challenges to Organisations – HRD Functions - Roles of HRD Professionals - HRD Needs Assessment - HRD practices – Measures of HRD performance – Links to HR, Strategy and Business Goals – HRD Program Implementation and Evaluation – Recent trends – Strategic Capability, Benchmarking and HRD Audit.

UNIT II E-HRM**6**

e- Employee profile– e- selection and recruitment - Virtual learning and Orientation – e - training and development – e- Performance management and Compensation design – Development and Implementation of HRIS – Designing HR portals – Issues in employee privacy – Employee surveys online.

UNIT III CROSS CULTURAL HRM**7**

Domestic Vs International HRM - Cultural Dynamics - Culture Assessment - Cross Cultural Education and Training Programs – Leadership and Strategic HR Issues in International Assignments - Current challenges in Outsourcing, Cross border Mergers and Acquisitions - Repatriation etc - Building Multicultural Organisation - International Compensation.

UNIT IV CAREER & COMPETENCY DEVELOPMENT**10**

Career Concepts – Roles – Career stages – Career planning and Process – Career development Models– Career Motivation and Enrichment –Managing Career plateaus- Designing Effective Career Development Systems – Competencies and Career Management – Competency Mapping Models – Equity and Competency based Compensation.

UNIT V EMPLOYEE COACHING & COUNSELING**12**

Need for Coaching – Role of HR in coaching – Coaching and Performance – Skills for Effective Coaching – Coaching Effectiveness– Need for Counseling – Role of HR in Counseling - Components of Counseling Programs – Counseling Effectiveness – Employee Health and Welfare Programs – Work Stress – Sources - Consequences – Stress Management Techniques.- Eastern and Western Practices - Self Management and Emotional Intelligence.

TOTAL: 45 PERIODS**OUTCOME:**

- Students will have a better understanding of the tools and techniques used by organizations to meet current challenges.

REFERENCES :

- Randy L. Desimone, Jon M. Werner – David M. Mathis, Human Resource Development, Cengage Learning, Edition 6, 2012.
- Paul Boselie. Strategic Human Resource Management. Tata McGraw Hill. 2012.
- Jeffrey A Mello, Strategic Human Resource Management, Cengage, Southwestern 2007.
- Robert L. Mathis and John H. Jackson, Human Resource Management, Cengage, 2007.
- Monir Tayeb. International Human Resource Management. Oxford. 2007
- Randall S Schuler and Susan E Jackson. Strategic Human Resource Management. Wiley India. 2nd edition
- McLeod. The Counsellor's workbook. Tata McGraw Hill. 2011

OBJECTIVES :

- To understand the various advanced databases used in the organization
- To be aware of recent trends in database management.

UNIT I INTRODUCTION**9**

DBMS Models - Multimedia Databases, Parallel Databases, embedded, web, spatial, temporal databases, Virtualization, Active Databases - Embedded databases - Web databases.

UNIT II DATABASE IMPLEMENTATION**9**

Query Processing basics and optimization – Heuristic Optimization – Transactions Models – Concurrency Control – Recovery – Security and Authorization – Storage – Indexing and Hashing – ISAM – B-Trees – Kd Trees – X Trees – Dynamic Hashing.

UNIT III DISTRIBUTED DATABASES**9**

Distributed Databases – Queries – Optimization Access Strategies – Distributed Transactions Management – Concurrency Control – Reliability

UNIT IV OBJECT ORIENTED DATABASES**9**

Object Oriented Concepts – Data Object Models –Object Oriented Databases – Issues in OODBMS – Object Oriented Relational Databases – Object Definition Languages – Object Query Languages

UNIT V EMERGING TRENDS**9**

Data Mining – Data warehousing – Star, Snowflake, Fact Constellation; open source database systems, Scripting Language, JDBC, ODBC

TOTAL: 45 PERIODS**OUTCOMES :**

- Awareness of database models
- Knowledge of database technologies

REFERENCES :

1. Peter Rob, Carlos Coronel, Database System and Design, Implementation and Management, 8th edition, Cengage,
2. Ramez Elmasri and Shamkant B. Navethe, Fundamentals of Database Systems, 7th edition , Pearson Education, 2015.
3. Jeffrey A Hoffer et al, Modern Database Management, 12th Edition, Pearson Education, 2016,
4. Abraham Silberchatz, Henry F. Korth and S.Sudarsan, Database System Concepts, 6th Edition, McGraw-Hill, 2015.
5. Thomas M. Connolly and Carolyn E. Begg, Database Systems – A Practical Approach to Design, Implementation and Management, 6th edition, Pearson Education, 2015.
6. Jeffrey D. Ullman and Jennifer Widom, A First Course in Database Systems, 3rd edition, Pearson Education Asia, 2013.
7. Stefano Ceri and Giuseppe Pelagatti, Distributed Databases Principles and Systems, McGraw-Hill International Editions, 2008.
8. Rajesh Narang, Object Oriented Interfaces and Databases, 1st edition ,Prentice Hall of India, 2004.
9. Mark L.Gillenson & el, Introduction to database management, 2nd edition, Wiley India Pvt. Ltd, 2012
10. Charkrabarti, Advanced Database Management Systems, Wiley India Pvt Ltd, 2011

OBJECTIVES :

- To know how to derive meaning from huge volume of data and information
- To understand how knowledge discovering process is used in business decision making

UNIT I INTRODUCTION**9**

Data mining, Text mining, Web mining, Spatial mining, Process mining, BI process- Private and Public intelligence, Strategic assessment of implementing BI

UNIT II DATA WAREHOUSING**9**

Data ware house – characteristics and view - OLTP and OLAP - Design and development of data warehouse, Meta data models, Extract/ Transform / Load (ETL) design

UNIT III DATA MINING TOOLS, METHODS AND TECHNIQUES**9**

Regression and correlation; Classification- Decision trees; clustering –Neural networks; Market basket analysis- Association rules-Genetic algorithms and link analysis, Support Vector Machine, Ant Colony Optimization

UNIT IV MODERN INFORMATION TECHNOLOGY AND ITS BUSINESS OPPORTUNITIES**9**

Business intelligence software, BI on web, Ethical and legal limits, Industrial espionage, modern techniques of crypto analysis, managing and organizing for an effective BI Team.

UNIT V BI AND DATA MINING APPLICATIONS**9**

Applications in various sectors – Retailing, CRM, Banking, Stock Pricing, Production, Crime, Genetics, Medical, Pharmaceutical.

TOTAL: 45 PERIODS**OUTCOMES :**

- Big Data Management
- Appreciate the techniques of knowledge discovery for business applications

REFERENCES :

1. Jaiwei Ham and Micheline Kamber, Data Mining concepts and techniques, Kauffmann Publishers 3 rd edition, 2011
2. Efraim Turban, Ramesh Sharda, Jay E. Aronson and David King, Business Intelligence, 3rd edition, Prentice Hall, 2014.
3. W.H.Inmon, Building the Data Warehouse, fourth edition Wiley India pvt. Ltd. 2005.
4. Ralph Kimball and Richard Merz, The data warehouse toolkit, John Wiley, 2005.
5. Michel Berry and Gordon Linoff, Mastering Data mining, John Wiley and Sons Inc, 3rd Edition, 2011
6. Michel Berry and Gordon Linoff, Data mining techniques for Marketing, Sales and Customer support, John Wiley, 3 rd edition 2011
7. G. K. Gupta, Introduction to Data mining with Case Studies, Prentice hall of India, 2014.
8. Giudici, Applied Data mining – Statistical Methods for Business and Industry, John Wiley. 2009
9. Elizabeth Vitt, Michael Luckevich Stacia Misner, Business Intelligence, Microsoft, 2011
10. Michalewicz Z., Schmidt M. Michalewicz M and Chiriac C, Adaptive Business Intelligence, Springer – Verlag, edition 2016
11. Galit Shmueli, Nitin R. Patel and Peter C. Bruce, Data Mining for Business Intelligence – Concepts, Techniques and Applications Wiley, India ,3rd edition, 2016

OBJECTIVES :

- To understand the business process of an enterprise
- To grasp the activities of erp project management cycle
- To understand the emerging trends in erp developments

UNIT I INTRODUCTION**8**

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

UNIT II ERP SOLUTIONS AND FUNCTIONAL MODULES**10**

Overview of ERP software solutions- Small, medium and large enterprise vendor solutions, BPR, and best business practices - Business process Management, Functional modules.

UNIT III ERP IMPLEMENTATION**10**

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

UNIT IV POST IMPLEMENTATION**8**

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

UNIT V EMERGING TRENDS ON ERP**9**

Extended ERP systems and ERP add-ons -CRM, SCM, Business analytics- Future trends in ERP systems-web enabled, Wireless technologies, cloud computing.

TOTAL: 45 PERIODS**OUTCOMES**

- Knowledge of ERP implementation cycle
- Awareness of core and extended modules of ERP

REFERENCES :

1. Alexis Leon, ERP demystified, second Edition Tata McGraw-Hill, 2008.
2. Sinha P. Magal and Jeffery Word, Essentials of Business Process and Information System, Wiley India, 2012
3. Jagan Nathan Vaman, ERP in Practice, Tata McGraw-Hill, 2008
4. Alexis Leon, Enterprise Resource Planning, third edition, Tata McGraw-Hill, 2014.
5. Mahadeo Jaiswal and Ganesh Vanapalli, first edition,ERP Macmillan India, 2013
6. Vinod Kumar Grag and N.K. Venkitakrishnan, ERP- Concepts and Practice, second edition Prentice Hall of India, 2009.
7. Summer, ERP, Pearson Education, 2016

OBJECTIVES:

- To understand the various project management phases – Initiation, Planning, Tracking and Closure
- To study various project estimation methodologies, process models and risk management
- To understand quality assurance in software development

UNIT I PROJECT MANAGEMENT OVERVIEW 8

What is Project and Project Management, Various phase of Project Management, Project Stakeholders, Project Management Organisation (PMO); Roles and Responsibilities of Project Manager. Brief introduction to various process models - Waterfall, RAD, V, Spiral, Incremental, Prototyping, Agile– SCRUM, Extreme Programming (XP) and Kanban **Project Initiation** - Project Charter; Statement of Work (SoW)

UNIT II PROJECT PLANNING 10

Project Planning Activities- Project Scope, Work Breakdown Structures (WBS), Software estimation methodologies - COCOMO Model and Function Point

Project Scheduling Techniques – Program Evaluation and Review Technique (PERT), Gantt Chart and Critical Path Method (CPM)

UNIT III PROJECT TRACKING 10

Monitoring and Control, Project Status Reporting; Project Metrics; Earned Value Analysis (EVA); Project Communication Plan & Techniques; Steps for Process Improvement.

Risk Management: Concepts of Risks and Risk Management; Risk Management Activities; Effective Risk Management; Risk Categories; Aids for Risk Identification; Potential Risk Treatments; Risk Components and Drivers; Risk Prioritization.

UNIT IV PROJECT CLOSURE 8

Project Closure Analysis, Lesson Learnt

Software Quality Assurance-Software Quality Assurance Activities; Software Qualities; Software Quality Standards – ISO Standards for Software Organization, Capability Maturity Model (CMM), Comparison between ISO 9001 & SEI CMM, Other Standards.

UNIT V AGILE PROJECT MANAGEMENT WITH SCRUM 9

Agile Manifesto and Agile Principles

Agile Scrum - Purpose, Values, Scrum Framework, Scrum Roles – Product Owner, Scrum Master & Team, Scrum Events – Sprint Planning, Daily Scrum/Stand-up Meeting, Sprint Review, Sprint Retrospective, Scrum Artefacts – Product Backlog, Sprint Backlog, Increment and Definition of Done (DoD), Agile estimation – Story Point

TOTAL:45 PERIODS

OUTCOMES:

At the end of this course, student should be able to:

- Manage different phases of Software Project Management
- Identify Risk and create risk mitigation plan
- Apply software quality assurance for better quality software delivery

REFERENCES:

- Bob Hughes and Mike Cotterell, Software Project Management, Tata McGraw Hill, 5th Edition
- Jalote, "Software Project Management in Practice", Pearson Education
- Ramesh, Gopalaswamy, "Managing Global Projects", Tata McGraw Hill
- Ken Schwaber, Agile Project Management with Scrum, Microsoft Press
- Mike Cohn, Agile Estimating & Planning, Pearson
- Royce, "Software Project Management", Pearson Education, 1999.

ONLINE RESOURCES:

- <http://agilemanifesto.org/>
- <https://www.scrum.org/Resources/What-is-Scrum>
- <http://www.scrumguides.org/scrum-guide.html#purpose>

BA5024

E- BUSINESS MANAGEMENT

L T P C
3 0 0 3

OBJECTIVES:

- To understand the practices and technology to start an online business

UNIT I INTRODUCTION TO e-BUSINESS

8

e-business, e-business vs e-commerce, Economic forces – advantages – myths – e-business models, design, develop and manage business, Web 2.0 and Social Networking, Mobile Commerce, S-commerce.

UNIT II TECHNOLOGY INFRASTRUCTURE

10

Internet and World Wide Web, internet protocols- FTP, intranet and extranet, Cloud Service Models – SAAS, PAAS, IAAS, Cloud Deployment Models – Public Cloud, Private Cloud, Hybrid Cloud, Auto-Scaling in the Cloud, Internet information publishing technology- basics of web server hardware and software

UNIT III BUSINESS APPLICATIONS

10

Consumer oriented e-business – e-tailing and models – Marketing on web – advertising, e-mail marketing, affiliated programs - e-CRM; online services, Business oriented e-business, e- governance, EDI on the internet, Delivery management system, Web Auctions, Virtual communities and Web portals – social media marketing

UNIT IV e-BUSINESS PAYMENTS AND SECURITY

9

E-payments - Characteristics of payment of systems, protocols, e-cash, e-cheque, e-Wallets and Micro payment systems- internet security – cryptography – security protocols – network security.

UNIT V LEGAL AND PRIVACY ISSUES

8

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

TOTAL: 45 PERIODS

OUTCOMES:

At the end of this course, student should be able to know how to build and manage an e-business

REFERENCES

1. Harvey M. Deitel, Paul J. Deitel, Kate Steinbuhler, e-business and e-commerce for managers, Pearson, 2011.
2. Efraim Turban, Jae K. Lee, David King, Ting Peng Liang, Deborah Turban, Electronic Commerce – A managerial perspective, Pearson Education Asia, 2010.
3. Kelly Goetsch - e Commerce in the Cloud, O Reilly Media, 2014.
4. Parag Kulkarni, Sunita Jahirabad kao, Pradeep Chande, e-business, Oxford University Press, 2012.
5. Hentry Chan & el, E-Commerce – fundamentals and Applications, Wiley India Pvt Ltd, 2007.
6. Gary P. Schneider, Electronic commerce, Thomson course technology, Fourth annual edition, 2007
7. Bharat Bhasker, Electronic Commerce, Framework technologies and Applications, 3rd Edition. Tata McGraw Hill Publications, 2009
8. Kamlesh K. Bajaj and Debjani Nag, Ecommerce- the cutting edge of Business, Tata McGraw Hill Publications, 7th reprint, 2009.

9. Kalakota et al, Frontiers of Electronic Commerce, Addison Wesley, 2004
10. Micheal Papaloelon and Peter Robert, e-business, Wiley India, 2006.
11. Michael Miller, Cloud Computing: Web-Based Applications That Change the Way You Work and Collaborate Online, Que Publishing, 2009

BA5025

LOGISTICS MANAGEMENT

L T P C
3 0 0 3

OBJECTIVE :

- To learn the need and importance of logistics in product flow.

UNIT I INTRODUCTION

9

Definition and Scope of Logistics – Functions & Objectives – Customer Value Chain – Service Phases and attributes – Value added logistics services – Role of logistics in Competitive strategy – Customer Service

UNIT II DISTRIBUTION CHANNELS AND OUTSOURCING LOGISTICS

9

Distribution channel structure - channel members, channel strategy, role of logistics and support in distribution channels. Logistics requirements of channel members. Logistics outsourcing – catalysts, benefits, value proposition. Third and fourth party logistics. Selection of service provider.

UNIT III TRANSPORTATION AND PACKAGING

9

Transportation System – Evolution, Infrastructure and Networks. Freight Management – Vehicle Routing – Containerization. Modal Characteristics, Inter-modal Operators and Transport Economies. Packaging- Design considerations, Material and Cost. Packaging as Unitisation. Consumer and Industrial Packaging.

UNIT IV PERFORMANCE MEASUREMENT AND COSTS

9

Performance Measurement – Need, System, Levels and Dimensions. Internal and External Performance Measurement. Logistics Audit. Total Logistics Cost – Concept, Accounting Methods. Cost – Identification, Time Frame and Formatting.

UNIT V CURRENT TRENDS

9

Logistics Information Systems – Need, Characteristics and Design. E-Logistics – Structure and Operation. Logistics Resource Management eLRM. Automatic Identification Technologies. Reverse Logistics – Scope, design and as a competitive tool. Global Logistics – Operational and Strategic Issues, ocean and air transportation. Strategic logistics planning. Green Logistics

TOTAL: 45 PERIODS

OUTCOME :

- To enable an efficient method of moving products with optimization of time and cost.

REFERENCES :

1. Bowersox Donald J, Logistics Management – The Integrated Supply Chain Process, Tata McGraw Hill, 3rd edition 2016
2. Sople Vinod V, Logistics Management – The Supply Chain Imperative, Pearson Education, 3rd Edition, 2012.
3. Coyle et al., The Management of Business Logistics, Cengage Learning, 7th Edition, 2004.
4. Ailawadi C Sathish & Rakesh Singh, Logistics Management, PHI, 2011.
5. Bloomberg David J et al., Logistics, Prentice Hall India, 2005.
6. Ronald H. Ballou, Business Logistics and Supply Chain Management, Pearson Education, 5th Edition, 2007.

OBJECTIVE :

- Understand how material management should be considered for profitability

UNIT I INTRODUCTION**9**

Operating environment-aggregate planning-role, need, strategies, costs techniques, approaches-master scheduling-manufacturing planning and control system-manufacturing resource planning-enterprise resource planning-making the production plan

UNIT II MATERIALS PLANNING**9**

Materials requirements planning-bill of materials-resource requirement planning-manufacturing resource planning-capacity management-scheduling orders-production activity control-codification.

UNIT III INVENTORY MANAGEMENT**9**

Policy Decisions-objectives-control -Retail Discounting Model, Newsvendor Model; EOQ and EBQ models for uniform and variable demand With and without shortages -Quantity discount models. Probabilistic inventory models.

UNIT IV PURCHASING MANAGEMENT**9**

Establishing specifications-selecting suppliers-price determination-forward buying-mixed buying strategy-price forecasting-buying seasonal commodities-purchasing under uncertainty-demand management-price forecasting-purchasing under uncertainty-purchasing of capital equipment-international purchasing

UNIT V WAREHOUSE MANAGEMENT**9**

Warehousing functions – types - Stores management-stores systems and procedures-incoming materials control-stores accounting and stock verification-Obsolete, surplus and scrap-value analysis-material handling-transportation and traffic management -operational efficiency-productivity-cost effectiveness-performance measurement

TOTAL: 45 PERIODS**OUTCOME :**

- Student gains knowledge on effective utilisation of materials in manufacturing and service organisation

REFERENCES :

1. J.R.Tony Arnold, Stephen N. Chapman, Lloyd M. Clive, Materials Management, Pearson, 2012.
2. P. Gopalakrishnan, Purchasing and Materials Management, Tata McGraw Hill, 2012
3. A.K.Chitale and R.C.Gupta, Materials Management, Text and Cases, PHI Learning, 2nd Edition, 2006
4. A.K.Datla, Materials Management, Procedure, Text and Cases, PHI Learning, 2nd Edition, 2006
5. Ajay K Garg, Production and Operations Management, Tata McGraw Hill , 2012
6. Ronald H. Ballou and Samir K. Srivastava, Business Logistics and Supply Chain Management, Pearson education, Fifth Edition
7. S. N. Chary, Production and Operations Management, Tata McGraw Hill , 2012

OBJECTIVE:

- Understand the application of structured methods to develop a product.

UNIT I INTRODUCTION**9**

Defining Product, Types of products. Product development – characteristics, duration and cost, challenges. Development Process: Generic Process- Adapting to product types. Evaluation – decay curve – cost expenditure curve.

UNIT II PRODUCT PLANNING**9**

Product Planning Process – Steps. Opportunity identification – breakdown structure- product development charter. Product Life Cycle. Technology Life Cycle - Understanding Customer Needs - Disruptive Technologies- Product Specification - Concept Generation – Activity- Steps- Techniques.

UNIT III PRODUCT CONCEPT**9**

Concept Selection – Importance, Methodology, concept Screening, Concept Scoring. Concept Testing. Product Architecture- Definition, Modularity, implication, Establishment, Delayed Differentiation, Platform Planning.

UNIT IV INDUSTRIAL DESIGN AND DESIGN TOOLS**9**

Industrial Design, Design for Manufacturing-Value Engineering-Ergonomics-Prototyping-Robust Design- Design for X-failure rate curve-product use testing-Collaborative Product development- Product development economics-scoring model- financial analysis.

UNIT V PATENTS**9**

Defining Intellectual Property and Patents, Patent Searches and Application, Patent Ownership and Transfer, Patent Infringement, New Developments and International Patent Law.

TOTAL: 45 PERIODS**OUTCOME**

- Student gains knowledge on how a product is designed based on the needs of a customer.

REFERENCES :

1. Karl T. Ulrich, Steven D. Eppinger, Anita Goyal Product Design and Development, Tata McGraw – Hill, Fourth Edition, reprint 2009.
2. Kenneth B.Kahn, New Product Planning, Sage, 2nd Edition 2011.
3. A.K. Chitale and R.C. Gupta, Product Design and Manufacturing, PHI, 2008.
4. Deborah E. Bouchoux, Intellectual Property Rights, Delmar, Cengage Learning, 2005.
5. Anil Mital. Anoop Desai, Anand Subramanian, Aashi Mital, Product Development, Elsevier, 2009.
6. Michael Grieves, Product Life Cycle Management, Tata McGraw Hill , 2006.
7. Kerber, Ronald L, Laseter, Timothy M., Strategic Product Creation, Tata-McGraw Hill, 2007.

OBJECTIVE:

- To learn the concepts of managing projects.

UNIT I INTRODUCTION TO PROJECT MANAGEMENT 9

Project Management – Definition –Goal - Lifecycles. Project Selection Methods. Project Portfolio Process – Project Formulation. Project Manager – Roles- Responsibilities and Selection – Project Teams.

UNIT II PLANNING AND BUDGETING 9

The Planning Process – Work Break down Structure – Role of Multidisciplinary teams. Budget the Project – Methods. Cost Estimating and Improvement. Budget uncertainty and risk management.

UNIT III SCHEDULING & RESOURCE ALLOCATION 9

PERT & CPM Networks - Crashing – Project Uncertainty and Risk Management – Simulation – Gantt Charts – Expediting a project – Resource loading and leveling. Allocating scarce resources – Goldratt's Critical Chain.

UNIT IV CONTROL AND COMPLETION 9

The Plan-Monitor-Control cycle – Data Collecting and reporting – Project Control – Designing the control system. Project Evaluation, Auditing and Termination.

UNIT V PROJECT ORGANISATION & CONFLICT MANAGEMENT 9

Formal Organisation Structure – Organisation Design – Types of project organizations. Conflict – Origin & Consequences. Managing conflict – Team methods for resolving conflict.

TOTAL: 45 PERIODS**OUTCOME:**

- To apply project management principles in business situations to optimize resource utilization and time optimisation.

REFERENCES :

1. Clifford Gray and Erik Larson, Project Management, Tata McGraw Hill Edition, 6e,2014.
2. John M. Nicholas, Project Management for Business and Technology - Principles and Practice, Second Edition, Pearson Education,5th Edition 2016
3. Gido and Clements, Successful Project Management, sixth Edition, Cengage, 2015.
4. Harvey Maylor, Project Management, Fourth Edition, Pearson Education, 2010

OBJECTIVE:

- To help understand how service performance can be improved by studying services operations management

UNIT I INTRODUCTION 9

Services – Importance, role in economy, service sector – growth; Nature of services -Service classification , Service Package, distinctive characteristics , open-systems view; Service Strategy – Strategic service vision, competitive environment, generic strategies, winning customers; Role of information technology; stages in service firm competitiveness; Internet strategies - Environmental strategies.

UNIT II SERVICE DESIGN **9**
 New Service Development – Design elements – Service Blue-printing - process structure – generic approaches –Value to customer; Retail design strategies – store size – Network configuration ; Managing Service Experience –experience economy, key dimensions ; Vehicle Routing and Scheduling

UNIT III SERVICE QUALITY **9**
 Service Quality- Dimensions, Service Quality Gap Model; Measuring Service Quality –SERVQUAL - Walk-through Audit; Quality service by design - Service Recovery - Service Guarantees; Service Encounter – triad, creating service orientation, service profit chain; Front-office Back-office Interface – service decoupling.

UNIT IV SERVICE FACILITY **9**
 Services capes – behaviour - environmental dimensions – framework; Facility design – nature, objectives, process analysis – process flow diagram, process steps, simulation; Service facility layout; Service Facility Location – considerations, facility location techniques – metropolitan metric, Euclidean, centre of gravity, retail outlet location , location set covering problem

UNIT V MANAGING CAPACITY AND DEMAND **9**
 Managing Demand – strategies; Managing capacity – basic strategies, supply management tactics, operations planning and control; Yield management; Inventory Management in Services– Retail Discounting Model, Newsvendor Model; Managing Waiting Lines –Queuing systems, psychology of waiting; Managing for growth- expansion strategies, franchising , globalization.

TOTAL: 45 PERIODS

OUTCOME:

- To design and operate a service business using the concepts, tools and techniques of service operations management.

REFERENCES :

1. James A. Fitzsimmons, Service Management – Operations, Strategy, Information Technology, Tata McGraw-Hill – 7th Edition 2013.
2. Richard Metters, Kathryn King-Metters, Madeleine Pullman, Steve Walton Successful Service Operations Management, South-Western, Cengage Learning, 2nd Edition ,2012
3. Cengiz Haksever, Barry Render, Roberta S. Russell, Robert G. Murdick, Service Management and Operations, Pearson Education – Second Edition.
4. Robert Johnston, Graham Clark, Service Operations Management, Pearson Education, 2nd Edition, 2005.
5. Bill Hollins and Sadie Shinkins, Managing Service Operations, Sage, 2006
6. J.Nevan Wright and Peter Race, The management of service operations, Cengage, 2nd Edition, 2004

BA5030	SUPPLY CHAIN MANAGEMENT	L T P C
		3 0 0 3

OBJECTIVE:

- To help understand the importance of and major decisions in supply chain management for gaining competitive advantage.

UNIT I INTRODUCTION **9**
 Supply Chain – Fundamentals –Evolution- Role in Economy - Importance - Decision Phases - Supplier-Manufacturer-Customer chain. - Enablers/ Drivers of Supply Chain Performance. Supply chain strategy - Supply Chain Performance Measures.

UNIT II	STRATEGIC SOURCING	9
Outsourcing – Make Vs buy - Identifying core processes - Market Vs Hierarchy - Make Vs buy continuum -Sourcing strategy - Supplier Selection and Contract Negotiation. Creating a world class supply base- Supplier Development - World Wide Sourcing.		
UNIT III	SUPPLY CHAIN NETWORK	9
Distribution Network Design – Role - Factors Influencing Options, Value Addition – Distribution Strategies - Models for Facility Location and Capacity allocation. Distribution Center Location Models. Supply Chain Network optimization models. Impact of uncertainty on Network Design - Network Design decisions using Decision trees.		
UNIT IV	PLANNING DEMAND, INVENTORY AND SUPPLY	9
Managing supply chain cycle inventory. Uncertainty in the supply chain -- Analyzing impact of supply chain redesign on the inventory - Risk Pooling - Managing inventory for short life - cycle products - multiple item -multiple location inventory management. Pricing and Revenue Management		
UNIT V	CURRENT TRENDS	9
Supply Chain Integration - Building partnership and trust in SC Value of Information: Bullwhip Effect - Effective forecasting - Coordinating the supply chain. . SC Restructuring - SC Mapping -SC process restructuring, Postpone the point of differentiation – IT in Supply Chain - Agile Supply Chains -Reverse Supply chain. Agro Supply Chains.		

TOTAL: 45 PERIODS

OUTCOME:

- Ability to build and manage a competitive supply chain using strategies, models, techniques and information technology.

REFERENCES :

1. Janat Shah, Supply Chain Management – Text and Cases, Pearson Education, 2009.
2. Sunil Chopra and Peter Meindl, Supply Chain Management-Strategy Planning and Operation, PHI Learning / Pearson Education, Sixth edition, 2015.
3. Ballou Ronald H, Business Logistics and Supply Chain Management, Pearson Education, 5th Edition, 2007.
4. David Simchi-Levi, Philip Kaminsky, Edith Simchi-Levi, Designing and Managing the Supply Chain: Concepts, Strategies, and Cases, Tata McGraw-Hill, 2005.
5. Altekhar Rahul V, Supply Chain Management-Concept and Cases, PHI, 2005.
6. Shapiro Jeremy F, Modeling the Supply Chain, Cengage, Second Reprint , 2002.
7. Joel D. Wisner, G. Keong Leong, Keah-Choon Tan, Principles of Supply Chain Management- A Balanced Approach, South-Western, Cengage, 2012.

SECTORAL SPECIALISATION IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT

BA5051

SUPPLY CHAIN CONCEPTS AND PLANNING

L T P C
3 0 0 3

OBJECTIVES:

- To describe the various streams of the supply chain
- To describe the drivers of the supply chain
- To describe the concepts employed in the supply chain
- To explain about the strategies employed in the supply chain

UNIT- I CONCEPTS OF SUPPLY CHAIN

9

Service and manufacturing supply chain dynamics - Evolution of supply chain management -Multiple views and flows - Service supply chains -Manufacturing supply chains - Measures of supply chain performance - Differentiation-Bullwhip effect

UNIT - II SUPPLY CHAIN PROCESSES AND STRATEGIES

9

Integrated supply chains design - Customer relationship process - Order fulfilment process - Supplier relationship process - Supply chain strategies - Strategic focus - Mass customization - Lean supply chains - Outsourcing and offshoring - Virtual supply chains.

UNIT - III SUPPLY CHAIN PERFORMANCE DRIVERS AND FORECASTING

9

Drivers of supply chain performance - Logistics drivers (Location, inventory and transportation) -Cross functional drivers (Pricing, information and sourcing) – Forecasting introduction -Framework for a forecast system - Choosing right forecasting technique - Judgment methods (Composite Forecasts, Surveys, Delphi Method, Scenario Building, Technology Forecasting, Forecast by Analogy) - Causal methods (Regression Analysis -Linear & Non-Linear Regression, Econometrics) - Time series analysis (Autoregressive Moving Average (ARMA), Exponential Smoothing, Extrapolation, Linear Prediction, Trend Estimation, Growth Curve, Box-Jenkins Approach) – CPFR

UNIT - IV SALES AND OPERATIONS PLANNING

9

Introduction to Sales and operations planning - Purpose of sales and operations plans -Decision context - Sales and operations planning as a process - Overview of decision support tools

UNIT- V RESOURCE PLANNING AND SCHEDULING

9

Enterprise resource planning - Planning and control systems for manufacturers – Materials requirement planning - Drum – Buffer – Rope system – Scheduling - Scheduling service and manufacturing processes - Scheduling customer demand - Scheduling employees - Operations scheduling.

TOTAL: 45 PERIODS

OUTCOMES:

The students will be able to

- Identify the concepts of supply chain.
- Analyze supply chain dynamics and various issues of supply chain performance.

TEXT BOOKS:

1. Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 2010.
2. Janat Shah, Supply Chain Management, Pearson Education India, 2009
3. Supply Chain management, Chandrasekaran,N., Oxford University Publications, 2010
4. Supply Chain Management for The 21st Century by B S SAHAY. Macmillan Education, 2001

OBJECTIVES

- To provide understanding of the framework.
- To illustrate current practices in industries.
- To provide knowledge on certain tools & techniques

UNIT - I INTRODUCTION TO PURCHASING AND SUPPLY CHAIN MANAGEMENT 9

The Purchasing Process. Purchasing Policies and Procedures. Supply Management Integration for Competitive Advantage, Purchasing and Supply Management Organization.

UNIT - II STRATEGIC SOURCING 9

Supply Management and Commodity Strategy Development, Supplier Evaluation and Selection Supplier Quality Management Supplier Management and Development, Creating a World-Class Supply Base, Worldwide Sourcing.

UNIT - III STRATEGIC SOURCING PROCESS 9

Strategic Cost Management, Purchasing and Supply Chain Analysis: Tools and Techniques, Negotiation and Conflict Management Contract Management Purchasing Law and Ethics.

UNIT - IV SUPPLIER PERFORMANCE AND QUALITY MANAGEMENT 9

Performance Measurement and Evaluation: Strategies, tools and techniques for measuring and managing supplier performance, Supplier performance evaluation, Purchasing services, Supply Chain Information Systems and Electronic Sourcing.

UNIT - V FUTURE DIRECTIONS 9

Purchasing and Supply Strategy Trends Green Buying, Sustainability, material research, Lean supply Chain Management

TOTAL: 45 PERIODS

OUTCOMES:

- To Understand basic functions and nuances.
- To Understand the holistic dimensions of SCM & corporate perspectives.
- Learn to acquire skills to become a sourcing professional.

TEXT BOOKS:

1. Purchasing and Supply Chain Management, Robert .M. Monczka, Handfield, Glunipero Paterson, Waters, 6th Edition, Cengage Publication
2. Purchasing and Supply Chain Management, . Benton, 3 rd Edition, Tata Mc Graw Hill.
3. World Class Supply Chain Management, Burt, Dobler, Starling, 7th Edition, Tata Mc Graw Hill.
4. Supply Chain Management For The 21st Century by B S SAHAY. Macmillan Education,2001

OBJECTIVE:

This course provides you the basic concepts and advanced models in inventory management. This course discusses issues related to inventory in a supply chain context. It also gives a multi-dimensional view to approach a problem with case studies.

UNIT I INTRODUCTION TO INVENTORY MANAGEMENT 9

Inventory in SCM, Cash to cash cycle time, measure of inventory in terms of days, Inventory turnover ratio and its relationship with working capital, Review of models, Q-models and P-models Aggregation of Inventory, Cycle stock concepts, Ordering multiple items in a single order to reduce cycle stock

UNIT II INVENTORY MODELS 9

Safety stock issues Safety stock with lead time and demand uncertainty (for Q-models), Short term discounting & Forward Buying, Periodic review models with safety stock, Comparison of P and Q systems

UNIT III INVENTORY MANAGEMENT STRATEGIES 9

Single period models, Inventory management for fashion supply chains, Postponement strategies to reduce inventory, Examples of Fashion supply chains: NFL Reebok, ZARA and Sport Obermeyer Risk Pooling, Applications, Risk pooling in different forms-Substitution, Specialisation, Postponement and Information pooling

UNIT IV INVENTORY OPTIMIZATION 9

Distribution resource planning techniques, Inventory and transportation integration decisions, Vendor Managed Inventory, Product availability measures, Product fill rate, order fill rate, Cycle service level.

UNIT V LATEST TRENDS IN INVENTORY MANAGEMENT SYSTEMS 9

Industry initiatives, Efficient consumer Response and Quick response ,CPFR and other industry initiatives, Inventory reduction strategies, Managing inventory in Reverse Logistics and Remanufacturing situations , Best practices in Inventory Management in a Supply Chain

TOTAL: 45 PERIODS**OUTCOME:**

At the end of this course, the students can confidently approach their supply chain inventory issues and they can use different tools appropriately to solve the problems and enhance the performance of their supply chains.

TEXT BOOKS:

1. Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 2010.
2. Janat Shah, Supply Chain Management, Pearson Education India, 2009
3. Supply chain management, Chandrasekaran,N., Oxford University Publications, 2010
4. Supply Chain Management For The 21st Century by B S SAHAY. Macmillan Education,2001

OBJECTIVES:

- To explain the various technological aspects that are described in the different logistical background
- To explain the real time description updated technologies in the logistics sector and supply chain industry

UNIT - I ELECTRONIC SCM, COMMUNICATION NETWORKS 9

Introduction e-SCM – e-SCM framework - Key success factors for e-SCM - Benefits of e-SCM- Positioning information in Logistics - Strategic information linkage - Supply chain communication networks - Role of communication networks in supply chains - Overview of telecommunication networks –EDI - Data security in supply chain networks - Overview of internet able models

UNIT - II ENTERPRISE INFORMATION SYSTEMS 9

Overview of enterprise information systems - Information functionality and principles -Introduction enterprise information systems -Classification of enterprise information systems- Information architecture -Framework for managing supply chain information - Describe on popular enterprise application packages -Benefits of enterprise information systems

UNIT - III SCM SYSTEMS DEVELOPMENT, DEPLOYMENT AND MANAGEMENT 9

Stakeholders in supply chain information systems - Stakeholders in SCM - Stakeholders in supply chain information systems - Information systems development- Logistics information systems design- Defining enterprise architecture - Choosing appropriate system development methodologies - Adopting relevant systems development model

UNIT - IV DEPLOYMENT AND MANAGEMENT 9

Information systems deployment - IT Operations and infrastructure management - Portfolio, programme and project management - Management of risk - Management of value

UNIT - V INFORMATION INTEGRATION 9

Enterprise application integration and supply chain visibility - Enterprise application integration - Supply chain visibility - Supply chain event management -Supply chain performance -Planning and design methodology - Problem definition and planning - Data collection and analysis - Recommendations and implementation -Decision support systems

TOTAL: 45 PERIODS**OUTCOME:**

The students will be able to understand the various enterprise information system and its architecture and benefits. Students can gain knowledge about various e-commerce models, e-SCM, benefits and communication networks.

TEXT BOOKS:

1. Bowersox & Closs, Logistical Management, McGraw-Hill Companies, 1996.
2. R.H.Ballou, Business Logistics Management, Prentice-Hall, 2004.

REFERENCES:

1. Strauss,E-Marketing, 4/e, Pearson Education 2008
2. Chaffey, E- Business and E- Commerce Management, 3/e, Pearson Education 2008
3. Blanchard, Logistics Engineering & Management, 6/e, Pearson Education 2008
4. Statistics for Managers Using MS Excel, 4/e, Levine, Pearson Education 2007
5. Donald J. Bowersox and David J. Closs, Logistical Management - The Integrated Supply chain

OBJECTIVES:

- To help the students in explaining the significance of Warehousing.
- To provide timely customer service,
- To keep track of items so they can be found readily & correctly
- To minimize the total physical effort
- To minimize the cost of moving goods in & out of stage.

UNIT - I INTRODUCTION WAREHOUSING 9

Introduction Warehousing – Basic Warehousing Decisions – Warehouse Operations – Types of Warehouses – Functions – Centralized & Decentralized – Storage Systems – Warehousing Cost Analysis – Warehouse Layout – Characteristics of Ideal Warehouse

UNIT - II INVENTORY MANAGEMENT 9

Inventory: Basic Concepts – Role in Supply Chain – Role in Competitive Strategy – Independent Demand Systems – Dependent Demand Systems – Functions – Types – Cost – Need for Inventory – Just in Time

UNIT - III INVENTORY CONTROL 9

Inventory Control – ABC Inventory Control – Multi-Echelon Inventory Systems – Distribution Requirement Planning – Bull Whip Effect – Using WMS for Managing Warehousing Operations

UNIT - IV MATERIALS HANDLING 9

Principles and Performance Measures Of Material Handling Systems – Fundamentals of Material Handling – Various Types of Material Handling Equipments – Types of Conveyors – Refrigerated Warehouses- Cold Chain- Agri SCM

UNIT - V MODERN WAREHOUSING METHODS 9

Modern Warehousing – Automated Storage & Retrieval Systems & their Operations – Bar Coding Technology & Applications in Logistics Industry – RFID Technology & Applications – Advantages of RFID

TOTAL: 45 PERIODS**OUTCOME:**

At the end of the course, the students will be able to get complete insight in to warehouse concepts, various inventory control techniques and application of inventory management in supply chain.

TEXT BOOKS:

1. Vinod.V.Sople, Logistics Management, Pearson Education, 2004.
2. Arnold, Introduction Materials Management, Pearson Education, 2009.

REFERENCES:

1. Frazelle, World Class Warehousing & Material Handling, Tata McGraw-Hill, 2008
2. Satish K. Kapoor and PurvaKansal, Basics of Distribution Management - A Logistical Approach, Prentice Hall, 2003
3. Satish K. Kapoor and PurvaKansal Marketing, Logistics - A Supply Chain Approach, Pearson Education, 2003

OBJECTIVES:

- To explore the fundamental concepts of transportation and distribution management
- To gain knowledge in network planning, routing and scheduling and application of IT in transportation and distribution management.

UNIT - I DISTRIBUTION**9**

Role of Distribution in Supply chain, Distribution channels – Functions, resources, Operations in Distribution, Designing Distribution network models - its features - advantages and disadvantages.

UNIT - II PLANNING**9**

Distribution network planning, Distribution network decisions, Distribution requirement planning (DRP)

UNIT - III TRANSPORTATION**9**

Role of Transportation in Logistics and Business, Principle and Participants-Scope and relationship with other business functions, Modes of Transportation - Mode and Carrier selection, Routing and scheduling.

UNIT - IV TRANSPORTATION**9**

International transportation, Carrier, Freight and Fleet management, Transportation management systems-Administration, Rate negotiation, Trends in Transportation.

UNIT - V INFORMATION TECHNOLOGY (IT)**9**

Usage of IT applications -E commerce – ITMS, Communication systems-Automatic vehicle location systems, Geographic information Systems.

TOTAL: 45 PERIODS**OUTCOMES:** The students will be able to:

- Gain knowledge about the distribution requirements planning.
- Predict the scope and relationship of transportation with other business functions
- Make use of the advantages and disadvantages of the various models.

TEXT BOOKS:

1. Raghuram and N. Rangaraj, Logistics and Supply chain Management – Leveraging Mathematical and Analytical Models: Cases and Concepts, New Delhi: Macmillan, 2000.
2. Janat Shah, Supply Chain Management, Pearson Education India, 2009.

REFERENCES:

1. Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 2010.
2. Michael B Stroh, Practical Guide to Transportation and Logistics, Logistics Network, 2006.
3. Alan Rushton, John Oxley, Handbook of Logistics & Distribution Management, Kogan Page Publishers, 2000.

OBJECTIVES:

- To prepare students successfully implement a contract logistics and closed supply chain in Retail, FMCG and Automobile sectors.
- To explain the concept and principle of contract logistics and closed supply chain

UNIT - I CONTRACT LOGISTICS

9

Third party logistics industry overview - A framework for strategic alliances - Evolution of contract logistics - Types of third party logistics providers – Automobile, FMCG and Retail-Third party services and integration

UNIT - II CLOSED LOOP SUPPLY CHAINS AND LOGISTICS

9

Introduction closed loop supply chains and logistics – Logistics and closed loop supply chain service - Overview of return logistics and closed loop supply chain models – Introduction product returns - Product Vs Parts returns - Strategic issues in closed loop supply chains

UNIT - III BUSINESS AND MARKET

9

Overview - Introduction life cycle management - Trends and opportunities – Auto Warranty management, return process and benchmarks - Market overview - Reasons for using reverse logistics - General characteristics - Consumer goods Depot repair and value added services - Operating dynamics - Competitive evaluation - Secondary markets and final disposal.

UNIT - IV EMERGING TRENDS

9

Emerging trends in Retail, E-Commerce- FMCG and Automobile sectors- Systems and technology - For consumer goods operations, High tech logistics system - Impact and value of advanced logistics

UNIT - V MANAGING PROCESSES

9

Managing processes - Step by step process - Use of third party service providers - Additional factors – Contemporary issues – Make in India and its impact on Countries GDP and Economic Growth.

TOTAL: 45 PERIODS

OUTCOME:

The students will be able to understand the basics of contract logistics, third party logistics industry and third party logistics providers. And it helps to gain knowledge about Make in India concept and its impact on the GDP growth

TEXT BOOKS:

1. Janat Shah, Supply Chain Management: Text and Cases, Pearson Education India, 2009
2. John Manners-Bell, Logistics and Supply Chains in Emerging Markets, Kogan Page, 2014.

REFERENCES:

1. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011
2. D. F. Blumberg, Reverse Logistics & Closed Loop Supply Chain Processes, Taylor and Francis, 2005
3. Hsin-I Hsiao, Wageningen, Logistics Outsourcing in the Food Processing Industry, Academic Pub, 2009.
4. Surendra M. Gupta, Sustainability in Supply Chain Management Casebook: Applications in SCM, McGraw Hill, 2013

OBJECTIVES:

- To provide the participants with a good knowledge of airfreight operations, services and management that can support them in various business functions and roles such as operations, customer service, account management and sales.
- To create awareness about the Air Cargo management.
- To provide general information or a framework on the setup of air cargo processes, for business.

UNIT - I AIR PORTS AND SHIPMENT

9

Ground Handling Agencies - Air Craft - Advantage of Air shipment - Economics of Air Shipment - Sensitive Cargo by Air shipment - Do's and Don'ts in Air Cargo Business

UNIT - II AIR CARGO

9

Air Cargo Console - Freight of Air Cargo - Volume based Calculation of Freight - Weight based Calculation of Freight - Import Documentation - Export Documentation

UNIT- III AIRWAY BILLS

9

Airway Bills - FIATA - IATA - History of IATA - Mission of IATA - Price setting by IATA -Licensing of Agencies - Sub Leasing of Agencies - freight carriers by scheduled freight tonne kilometers flown

UNIT - IV CARGO VILLAGE

9

History of Dubai Cargo Village - Location of DCV - Equipment and Handling at DCV - Operations - Advantage of Sea Air Cargo - Why Sea Air Cargo is Cheaper - Why Air freight from Dubai is Cheaper?

UNIT - V DG CARGO

9

DG Cargo by Air - Classification and labelling - Types of Labels according Cargo – Samples of Labels
- Packing and Transportation of DG Goods by Air

TOTAL: 45 PERIODS

OUTCOME:

The outcome of this course will provide the basics concepts of airports and aircrafts and various participants in air cargo transportation. Students will come to know about roles of the customs and the government in air transport.

TEXT BOOKS:

1. Yoon SeokChang, Air Cargo Management, CRC Press, 2015.
2. Xie Chun Xun Zhu, Air Cargo Management Introduction - Aviation Logistics, Management Series (Chinese Edition), Southeast University Press, 2006.
3. Hampton Simon Taylor, Air transport logistics, CRC Press, 2000.

REFERENCES:

1. Paul, Air cargo distributions: a management analysis of its economic and marketing benefits, Jackson and William Brackenridge (Gower Press), 1988.
2. Peter S. Smith, Air freight: operations, marketing and economics, Chu (Boston : Kluwer Academic Publishers), 2004.
3. John Walter wood, Airports; some elements of designs and future development, Chu(Boston : Kluwer Academic Publishers), 1981.

OBJECTIVES:

- To provide an overview of the various elements of containerization and allied businesses
- To realize the potential of containerization and allied businesses

UNIT –I BASIC CONCEPT OF CONTAINERIZATION 9

Introduction to Liner Shipping industry - Unitization concept and methods - Malcolm Mclean and the birth of containerization - Generations of container ships and their specification - Container types, their specifications and cargoes carried in them.

UNIT –II FREIGHTING AND SIZE OF CONTAINER 9

Container shipping business - FCL and LCL sea freight products - Freight of FCL and LCL cargo - Slot utilization strategies - Estimation of optimum container fleet size - Multiport LCL consolidation

UNIT – III CHARACTERISTICS AND PHYSICAL OPERATIONS 9

Containerisation: Concept, Classification, Benefits and Constraints, Container terminal business-World's leading container terminals and location characteristics - container terminal infrastructure - container terminal productivity and profitability-Inland container Depots(ICD)Roles and functions - Container Freight Stations(CFS),Clearance at ICD, CONCOD,ICD's under CONCOD, Charting: Kinds of Charter, Charter Party and Arbitration.

UNIT – IV CONTAINER TYPES AND BUSINESS 9

Container manufacturing trends - Container leasing business - Types of container leasing and their terms - maintenance and repair of containers - tracking of container movements - Container interchange.

UNIT – V MULTIMODAL TRANSPORT 9

Alternate uses of containers -marketing of used containers -carriage of shipper own containers - multimodal transport options for containers -Insurance for containers -strategies for managing container imbalance.

TOTAL: 45 PERIODS**OUTCOMES:**

- The students will learn the practices and ways to promote containerization and allied businesses
- The learners will have a complete idea about the different concepts, trends and strategies used for containerization and allied businesses

REFERENCES:

1. Marc Levinson, The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger, Princeton University Press, 2008.
2. Dr. K. V. Hariharan, Containerisation, Multimodal Transport & Infrastructure Development In India, Sixth Edition, Shroff Publishers and Distributors, 2015.
3. Lee, C.-Y., Meng, Q. (Eds.), Handbook of Ocean Container Transport Logistics Making Global Supply Chains Effective, Springer, 2015
4. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011

OBJECTIVES:

- To enlighten the students about the major functions in export and import processes.
- To provide the expertise for solving issues related to requirements in EXIM management.

UNIT – I FUNDAMENTALS OF IMPORT AND EXPORT 9

Role of Import and Export Trade in an Economy - Institutional Framework for Foreign trade in India -Role of Director General of Foreign Trade and Commerce - Objectives of EXIM Policy - Global trade flows - Contract of International Sale of Goods - INCOTERMS 2010

UNIT - II OVERVIEW OF EXPORT AND IMPORT 9

Marketing for Exports - Negotiation and finalization of Export contract - Export Documentation Procedures - Cargo Insurance - Export Promotion Councils and incentive schemes- Role of Logistics in Exports- Export Houses / Trading Houses

UNIT - III DOCUMENTATION FRAMEWORK 9

Import for industrial use / trading - Import Documentation and Customs clearance procedures - Types of Imports - Import Licenses - Cargo Insurance - Role of Logistics in Import

UNIT - IV CREDIT AND PAYMENTS 9

Payment methods in Foreign Trade - Documentary Credit / Letter of Credit–LOU-UCP 600 with respect to Shipping Documents and L/C Negotiation – Export / import financing strategies - Managing payment risks.

UNIT - V CUSTOMS CLEARANCE AND AGENCIES 9

Roles of Service providers in EXIM transactions – Global Traders – Commodity Brokers - Custom House Agents – Transport Operators – Freight Forwarders – Warehousing and 3PL service providers – Liners /Ship Agencies – Container Freight Stations - Port – Inspection Agencies/ surveyors – Quarantine Agencies – Pest Control Agencies – Chamber of Commerce.

TOTAL: 45 PERIODS**OUTCOMES:**

- The students would be aware about the formalities of export and import industry
- The students will be able to comprehend the importance of exim management.

REFERENCES:

1. Justin Pauland Rajiv Aserkar, Export Import Management, Second Edition, Oxford University Press, 2013.
2. UshaKiranRai, Export - Import and Logistics Management, Second Edition, PHI Learning, 2010.
3. Director General of Foreign Trade, Foreign Trade Policy and Handbook of Procedures, 2015
4. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011

OBJECTIVES:

- To provide the knowledge about fundamentals of shipping management
- To equip the students with the knowledge of shipping, ship building and repair

UNIT – I	INTERDICTION OF SHIPPING	9
Role of Shipping in International trade-Types of ships and cargoes carried by them - International Organizations serving the shipping industry (IMO, BIMCO, ICS, IACS, IAPH)- Ship Registration and Classification.		
UNIT – II	LINER SHIPPING OPERATIONS	9
Liner shipping business - Types of Liner services - Container shipping lines and their services - Break bulk, Ro-Ro and project cargo services - Liner freight rates - Liner cargo documentation - Liner agency functions		
UNIT – III	DRY BULK BUSINESS	9
Dry Bulk shipping business- World's leading dry bulkports and cargoes handled by them - Types of Dry bulk ships and the Dry Bulk industry structure - Dry bulk market indices - Types of Chartering - Port agency functions.		
UNIT – IV	TANKER OPERATIONS AND BUSINESS	9
Liquid Bulk shipping business - World's leading wet bulk ports and cargoes handled by them- Types of tankers and gas carriers - Tanker freighting system (worldscale) -Factors affecting Tanker markets-Marine pollution conventions.		
UNIT – V	SHIP BUILDING AND REPAIR	9
Service providers to shipping industry -Ship management companies -Ports, inland terminals and Container Freight Stations- Ship building and repair yards -Financing the Shipping industry - Marine insurance providers.		

TOTAL: 45 PERIODS

OUTCOMES:

- The students would be acquainted with the basics of shipping management
- The students will learn the skills needed for shipping industry

REFERENCES:

1. Michael Robarts, Branch"s Elements of Shipping, Ninth Edition, Routledge, 2014.
2. Peter Brodie, Commercial Shipping Handbook, Third Edition, Informa Law from Routledge, 2014.
3. Review of Maritime Transport, UNCTAD, 2014.
4. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011

BA5062	PORT AND TERMINAL MANAGEMENT	L T P C
		3 0 0 3

OBJECTIVES:

- To enlighten the students about the major functions in the port and terminal management
- To expose the students on the trends in port and terminal management

UNIT – I	INTRODUCTION TO PORT AND TERMINAL	9
Role of ports in international trade and transport - Economic impact of ports on the regional economy - Multiplier effect - Location characteristics of ports - Different types of ports (natural, manmade, river, estuary).		
UNIT – II	PORT OPERATIONS	9
Design features of facilities in ports for handling various cargoes - Organization structure in Ports - Delivery of port services and the relationship between various departments - Marine Department – Traffic Department – other departments.		

UNIT – III	PORT MARKETING AND SERVICES	9
Marketing of Port services - Pricing of Port services - Components of port tariff - Concept of hinterland – Identifying the needs of ship owners and operators, ship agents, forwarders, truckers, rail and barge operators - Concept of Total Logistics cost.		
UNIT – IV	PORT PERFORMANCE	9
Measurement of port performance - vessel turn round time, cargo volume, speed of cargo handling - Information flow requirements of the port, statutory bodies and port users - Port community computer systems and EDI applications.		
UNIT – V	PORT SECURITY AND ISSUES	9
Environmental issues connected with Ports & Terminals - Health and safety issues - Port security issues - International Ships and Port facility security (ISPS) code - Role of national, regional and local governments in owning / operating / managing ports.		

TOTAL: 45 PERIODS

OUTCOMES:

- The students would be aware about skills pertaining to port and terminal management
- The students should be able to understand the principles and applications for port and terminal management

REFERENCES:

1. Maria G. Burns, Port Management and Operations, CRC Press, 2014.
2. Patrick Alderton, Port Management and Operations, Third Edition, Lloyd's Practical Shipping Guides, 2008
3. H. Ligteringen, H. Velsink, Ports and Terminals, VSSD Publishers, 2012.
4. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011

SECTORAL SPECIALISATION IN

INFRASTRUCTURE AND REAL ESTATE MANAGEMENT

BA5063	INFRASTRUCTURE PLANNING, SCHEDULING AND CONTROL	L T P C
		3 0 0 3

OBJECTIVE:

- To give an exposure to the students on the concept and the principles of planning, scheduling and control about infrastructure industry.

UNIT I	INTRODUCTION	9
Introduction to infrastructure - Need and importance of infrastructure in India - Overview of power sector - Overview of water supply and sanitation sector-Overview of road, rail, air and port transportation sectors-Overview of telecommunication sector-Overview of rural and urban infrastructure-Introduction to special economic zones-Organizations and players in infrastructure field -Overview of infrastructure project finance.		
UNIT II	INFRASTRUCTURE PRIVATIZATION	9
Privatization of infrastructure in India - Benefits of privatization-Problems with privatization-Challenges in privatization of water supply projects- Challenges in privatization of power sector projects – Challenges in privatization of road transportation projects.		

9

UNIT IV RISK MANAGEMENT FRAMEWORK

9

UNIT V DESIGN & MAINTENANCE OF INFRASTRUCTURE

9

TOTAL :45 PERIODS

- explain the basic concepts related to infrastructure and understand management.
- explain the benefits and problems with infrastructure
- identify the challenges and strategies for successful planning and implementation of infrastructure.
- apply the above concepts to various infrastructure domains.

1. Raina V.K, “Construction Management Practice – The inside Story”, Tata McGraw Hill Publishing Limited, 2005
2. Leslie Feigenbaum, “Construction Scheduling With Primavera Project Planner”, Prentice Hall, 2002
3. W.Ronald Hudson, Ralph Haas, Waheed Uddin, “Infrastructure Management: Integrating, Design, Construction, Maintenance, Rehabilitation and renovation”, McGraw Hill Publisher, 2013
4. Prasanna Chandra, “Projects – Planning, Analysis, Selection, Implementation Review”, Tata McGraw Hill Publishing Company Ltd., New Delhi. 2006.
5. Joy P.K., “Total Project Management - The Indian Context”, Macmillan India Ltd., 1992
6. Report on Indian Urban Infrastructure and Services – The High Powered Expert Committee for estimating the Investment Requirements for Urban Infrastructure Services, March 2011
7. Urban Water Development in India 2011 – Published and Distributed by India Infrastructure Research
8. Manual on sewerage and sewage treatment, CPHEEO, Ministry of urban affairs and employment, Govt.of India, New Delhi, 2012
9. Manual of National Highway Authority of India, 1988

CONTRACTS AND ARBITRATION

L T P C
3 0 0 3

- To create awareness on contracts for construction industry, impart knowledge on tender preparation, tendering process, laws on arbitration, arbitration procedure and laws on dispute resolution in India.

UNIT I	INTRODUCTION TO CONTRACTS IN CONSTRUCTION INDUSTRY	9
Brief details of engineering contracts -Definition, types and essentials of contracts and clauses for contracts - Preparation of tender documents and contract documents - Issues related to tendering process- Awarding contract, e-tendering process - Time of performance - Provisions of contract law - Breach of contract - Performance of contracts - Discharge of a contract- Indian contract Act 1872 - Extracts and variations in engineering contracts - Risk management in contracts.		
UNIT II	LAWS RELATED TO CONSTRUCTION INDUSTRY	9
Labor and industrial laws - Payment of wages act, contract labor - Workmen's compensation act - Insurance, industrial dispute act- Role of RERA		
UNIT III	ARBITRATION OF ENGINEERING CONTRACTS	9
Background of Arbitration in India - Indian Arbitration Act 1937 - UNCITRAL model law -Forms of arbitration - Arbitration agreement - Commencement of arbitral proceedings - Constitution of arbitral tribunal - Institutional procedure of arbitration -Impartiality and independence of arbitrators jurisdiction of arbitral tribunal - Interim measures - Enforcement of awards.		
UNIT IV	NEGOTIATION, MEDIATION AND CONCILIATION	9
Concepts and purpose - Statutory back ground ADR and mediation rules - Duty of mediator and disclose facts - Power of court in mediation.		
UNIT V	ALTERNATE DISPUTE RESOLUTION	9
Structure of Indian Judicial - The arbitration and reconciliation ordinance 1996 -Dispute resolution mechanism under the Indian judicial system - Litigation in Indian courts - Case studies.		
		TOTAL :45 PERIODS

OUTCOMES:

On successful completion of the course, students will be able to

- understand the laws on contracts for construction industry in india
- apply knowledge of contracts in preparation of contract document and tendering process
- apply appropriate methods to assess the critical factors in contracts leading to arbitration and disputes between the parties
- suggest suitable type of arbitration or dispute resolution for the situation of problem

REFERENCES

1. American Arbitration Association, "Construction industry arbitration rules and mediation procedures", 2007
2. Case study of Southern Railway Arbitration Cases wiki.ircen.gov.in/doku/lib/exe/fetch.php
3. Collex.K, "Managing Construction Contracts", Reston publishing company, Virginia, 1982
4. Eastern Book Company "Arbitration and Conciliation Act 1996", June 2008
5. International Federation of Consulting Engineers (FIDIC) documents, Geneva, 2009 (<http://www.fidic.org>)
6. Gajaria. G.T., "Laws relating to building and Engineer's Contracts", M.M. Tripathi Pvt Ltd., Mumbai, 1985
7. Horgon.M.O and Roulstion F.R., "Project Control of Engineering Contracts" E and FN, SPON, Norway, 1988
8. Krishna Sharma, Momota Oinam and Angshuman Kaushik, "Development and Practice of Arbitration in India- Has it evolved as an effective legal Institution", CDDRL, Stanford, 103, Oct 2009
9. Park.W.B., "Construction Bidding for Projects", John Wiley, Norway, 1978
10. Roshan Namavati, "Professional Practice", Anuphai Publications, Lakhani Book Depot, 2013
11. Vasavada.B.J. "Engineering Contracts and Arbitration", March 1996

OBJECTIVE:

- To impart projects types, time & resource management, resource optimization and new trends in project management.

UNIT I PROJECT AND ITS PROCESS

Define project and process -Boundaries of project - Objectives and functions of project management -Characteristics and types of projects -Organization structure / styles -Roles of project management group - Project management office and its role - Project knowledge area - Project integration- Process group interaction -project flow - Project life cycle- Influencing factors. - Case study.

UNIT II PROJECT TIME MANAGEMENT

Project scope management - Work break down structure - Activity/Task – Events - Case study - Project planning tools - Rolling wave planning - Gantt charts, Milestone chart, Program progress chart- Creating milestone plan - Project network- Fulkerson's rules - A-O-A and A-O-N networks - Analyze project time- Critical path method (deterministic approach) - Activity oriented network analysis- 80-20 rule- Case study - Type of time estimates & square network diagram - Project updating and monitoring- Case study - Estimate time- Program Evaluation & Review Technique (Probabilistic approach)- Event oriented network analysis- Optimistic, pessimistic and most likely time - Degree of variability in average time - Probabilistic estimate - % utilization of resources.

UNIT III RESOURCE MANAGEMENT

Types of Resource- Time, Men, Material, Machinery, Money, Space - Balancing of resource - Resource smoothing technique- Time constraint - Resource leveling technique- Resource constraint- Case study.

UNIT IV RESOURCE OPTIMIZATION

Types of cost – Direct, indirect and total cost - Variation of cost with time - Schedule compression techniques- Crashing, fast tracking & Re-estimation- Crash timeand crash cost - Optimize project cost for time and resource - CPM cost model - Life cycle assessment - Impacts and economical assessment - Life cycle cost- Maintenance and operation -Life cycle forecasting – Concept and applications.

UNIT V EMERGING TRENDS IN PROJECT MANAGEMENT

AGILE Project management and Project Management using latest tools- Case study.

TOTAL :45 PERIODS

OUTCOMES:

On successful completion of the course, the students will be able to

- explain the concept of projects, its process, objectives and functions of project management
- analyze and manage time in projects through gantt charts, cpm and pert techniques
- balance resource requirements of projects so as to avoid idling of resources
- update projects and determine revised schedule of activities and critical path, if any
- crash projects to determine its optimum time-minimum cost relationships

REFERENCES

1. "A Guide to the Project Management Body of Knowledge (PMBOK Guide) – Fourth Edition, An American National Standard, ANSI/PMI 990001-2008"
2. A Risk Management Standard, AIRMIC Publishers, ALARM, IRM: 2002
3. Gene Dixon, "Service Learning and Integrated Collaborative Project Management", Project Management Journal, DOI:10.1002/pmi, February 2011, pp.42-58
4. Jerome D. Wiest and Ferdinand K. Levy, "A Management Guide to PERT/CPM", Prentice Hall of India Publishers Ltd., New Delhi, 1994.

5. Punmia B. C. and Khandelwal K.K., "Project Planning and Control with PERT/CPM", Laxmi publications, New Delhi, 1989.
6. Srinath L.S., "PERT & CPM- Principles and Applications", Affiliated East West Press Pvt., Ltd., New Delhi, 2008
7. Sengupta. B and Guha. H, "Construction Management and Planning", Tata McGraw Hill, New Delhi, 1995
8. SangaReddi. S and Meiyappan. PL, "Construction Management", Kumaran Publications, Coimbatore, 1999

BA5066 MANAGEMENT OF HUMAN RESOURCES, SAFETY AND QUALITY

L T P C
3 0 0 3

OBJECTIVE:

- to impart knowledge on management of human resources, labor legislation, safety and quality aspects in construction

UNIT I HUMAN RESOURCES MANAGEMENT 9

Introduction - Concept- Growth - Role and function - Manpower planning for construction companies - Line and staff function - Recruitment, selection, placement, induction and training; over staffing; Time office and establishment functions; wage and salary administration - Discipline - Separation process.

UNIT II LABOR LEGISLATION 9

Labor laws- Labor law relating to construction industry- Interstate migration- Industrial relations- Collective bargaining- Worker's participation in management - Grievance handling - Discipline - Role of law enforcing agencies and judiciary -Women in construction industry.

UNIT III SAFETY MANAGEMENT 9

Importance of safety- Causes of accidents -Responsibility for safety - Role of various parties in safety management -Safety benefits- Approaches to improve safety in construction for different works - Measuring safety.

UNIT IV SAFETY IMPLEMENTATION 9

Application of ergonomics to the construction industry - Prevention of fires at construction site- Safety audit.

UNIT V QUALITY MANAGEMENT IN CONSTRUCTION 9

Importance of quality - Elements of quality - Quality characteristics- Quality by design - Quality conformance -Contractor quality control - Identification and traceability - Continuous chain management - Brief concept and application - Importance of specifications- Incentives and penalties in specifications - Workmanship as a mark of quality - Final inspection - Quality assurance techniques - Inspection, testing, sampling - Documentation - Organization for quality control, Cost of quality - Introduction to TQM, Six sigma concept- ISO 14000 in quality management.

TOTAL :45 PERIODS

OUTCOMES:

On successful completion of the course, students will be able to

- Identify the need and importance of human resource management, labour laws relating to construction industry
- Identify the need and measures to improve safety in construction industry and safety audit
- Identify the need for applying ergonomics to construction industry
- Enumerate the need, importance, elements of quality and significance of quality assurance in industry

REFERENCES

1. Arya Ashok, "Human Resources Management – Human Dimensions in Management" March 24-26, 2011, Organizational Development Programme Division – New Delhi
2. Arya Ashok, "Essence of Labour Laws" - www.odiindia.in/about-the-books.pdf
3. Arya Ashok "Discipline & Disciplinary procedure" Organisation Development Institute, 1998
4. Arya Ashok, "Management case studies – An analytical and Developmental Tool" Organisation Development Institute, New Delhi, 1999
5. Corleto Coulter, Jill Justice Coulter, "The Complete Standard Handbook of Construction Management", Prentice Hall, (1989)
6. Dwivedi R.S., "Human Relations and Organisational Behaviour", (BH – 1987)
7. Grant E.L., and Levensworth, "Statistical Quality Control", Mc Graw Hill, 1984.
8. James J Obrien, "Construction Inspection Handbook – Quality Assurance and Quality Control", Van Nostrand, New York, 1989
9. Josy J. Farrilaro, "Hand Book of Human Resources Administration" Mc.Graw Hill (International Edition) 1987.
10. Juran Frank, J.M. and Gryna F.M. "Quality Planning and Analysis", Tata Mc Graw Hill, 1982.
11. Malik, P.L., "Handbook of Labour & Industrial Law", Eastern book company, Lucknow, 2010
12. Manoria C.B., "Personnel Management", Himalaya Publishing House, 1992.

BA5067

DISASTER MITIGATION AND MANAGEMENT

L T P C
3 0 0 3

OBJECTIVES:

- To create an awareness on the various types of disasters and to expose the students about the measures, its effect against built structures, and hazard assessment procedure in India.
- To impart knowledge on the methods of mitigating various hazards such that their impact on communities is reduced.

UNIT I INTRODUCTION

9

Difference between hazards and disaster -Types of disasters-Phases of disaster management - Hazards - Classification of hazards - Hazards affecting buildings - Building safety against hazards - Floods - Cyclone - Landslides -Tsunami - Fire.

UNIT II EARTHQUAKE DISASTER

9

Earthquake hazard map -Causes of earthquakes -Classification of earthquakes -Seismic waves - Energy release - Inertia forces - Natural period - Resonance - Damping -Seismic response of free vibration -Seismic response of damped vibration -Performance of ground and buildings in past earthquakes-Earthquake resistant measures in RC and masonry buildings - Potential deficiencies of RC and masonry buildings.

UNIT III OTHER DISASTERS

9

Landslides-Landslide zoning map - Causes -Protection measures Floods -Flood zone map - Effects on buildings -Protection measures from damage to buildings -Mitigation strategies -Tropical cyclones - Effects on buildings -Protection measures from damage to buildings - Tsunami - Tsunami wave characteristics -Peculiarities of tsunami deposits -Tsunami impact on coastal lines- Effects of Tsunami on built structures - Fire disaster - Causes and effects of fire disaster - Preventive mechanism .

UNIT IV HAZARD ASSESSMENT

9

Visual inspection and study of available documents -Detailed in-situ investigation planning and interpretation of results-Foundation capability -Non-structural components - Seismic strengthening of buildings –Repairs, restoration and strengthening of existing buildings - Strengthening materials -Retrofitting of load bearing wall buildings - Retrofitting of RC Buildings-RVS method of screening - RC and masonry structures -Seismic hazard assessment - Deterministic seismic hazard analysis - PSHA.

UNIT V LAND USE ZONING REGULATIONS , QUALITY CONTROL AND DISASTER MANAGEMENT POLICY

9

Introduction-Community planning - Community contingency plan - Report building and initial awareness - Recommendations for land use zoning regulations - Construction quality control - Evolution of quality management -Reasons for poor construction -Construction of quality control in masonry structures - Disaster management policy and procedure -Legal frame work - Institutional mechanism - Schemes and grants on DM - Recommendation of 13th finance commission -Plan schemes - Non plan schemes - Externally aided schemes Role of NDRF in Disaster Management - Medical First Responder - Flood Rescue &Relief Management.

TOTAL :45 PERIODS

OUTCOMES:

On successful completion of the course, students will be able to

- understand the various types of disaster viz hydrological, coastal and marine disasters, atmospheric disasters, geological, mass movement and land disasters, wind and water driven disasters.
- to identify the potential deficiencies of existing buildings for eq disaster and suggest suitable remedial measures.
- derive the guide lines for the precautionary measures and rehabilitation measures for eq disaster.
- understand the effects of disasters on built structures
- derive the protection measures against floods, cyclone and land slides
- understand the hazard assessment procedure
- get the awareness regarding landuse zoning regulations &quality control

REFERENCES

1. Annual Report, Ministry of Home Affairs, Government of India, 2009-10
2. Ayaz Ahmad, "Disaster Management: Through the New Millennium" Anmol Publications, 2003
3. Berg.GV, "Seismic Design codes and procedures", EERI, CA,1982
4. Booth, Edmund, "Concrete Structures in earthquake regions; Design and Analysis", Longman, 1994
5. Dowrick. D.J, "Earthquake resistant design for Engineers and Architects", John Wiley & Sons, Second Edition, 1987.
6. Ghosh G.K. "Disaster Management", A.P.H. Publishing Corporation, 2006
7. Goel, S. L. "Encyclopaedia of Disaster Management", Deep & Deep Publications Pvt Ltd.,2006
8. Jaikrishna & A.R.Chandrasekaran, "Elements of Earthquake Engineering", Sarita Prakashan, Meerut,1996
9. Singh R.B, "Disaster Management", Rawat Publications, 2008
10. Thirteenth Finance Commision Report, Ministry of Finance, Government of India, 2010-15

OBJECTIVE:

- To study the concepts of construction economics and finance such as comparing alternatives proposals, evaluating alternative investments, management of funds, Insurance procedures, risks involved and economics of costing.

UNIT I BASIC PRINCIPLES 9

Time Value of Money - Cash flow diagram - Nominal and effective Interest - Continuous interest - Nominal and effective interest- continuous interest . Single Payment Compound Amount Factor (P/F,F/P) – Uniform series of Payments (F/A,A/F,F/P,A/P)– Problem time zero (PTZ)- equation time zero (ETZ). Constant increment to periodic payments – Arithmetic Gradient(G), Geometric Gradient (C)

UNIT II MARKET STRUCTURE AND CONSTRUCTION ECONOMICS 9

Types of Market Structure in the Construction Industry – Markets and the competitive environment- Perfect competition -. Monopolistic competition - Oligopoly - Monopoly – Characteristics and economic Profit – Construction Economics – BOOT, BOT, BOO Methods - Depreciation - Inflation-Taxes

UNIT III EVALUATING ALTERNATIVE INVESTMENTS 9

Present worth analysis, Annual worth analysis, Future worth analysis, Rate of Return Analysis (ROR) and Incremental Rate of Return (IROR) Analysis, Benefit/Cost Analysis, Break Even Analysis - Replacement Analysis- Equipment Replacement Analysis.

UNIT IV FUNDS MANAGEMENT 9

Project Finance - Sources - Working capital management- Inventory Management- Mortgage Financing-- Interim construction financing - Security and risk aspects

UNIT V ECONOMICS OF COSTING 9

Construction accounting-Chart of accounts- Meaning and definition of costing - Types of costing - Methods of calculation (Marginal costing, cost sheet, budget preparation) – Equipment Cost- Replacement Analysis - Role of costing technique in real estate and infrastructure management.

TOTAL: 45 PERIODS

OUTCOME:

- On completion of this course the students will be able to know the concepts in Economics and Finance in Construction.

REFERENCES

1. Pandey, I.M, Financial Management, 12th Edition Vikas Publishing House Pvt. Ltd., 2012.
2. Prasanna Chandra, Financial Management, 9th edition, Tata McGraw Hill, 2012.
3. Paul A. Samuelson, William D. Nordhaus, Sudip Chaudhuri and Anindya Sen, Economics, 19th edition, Tata McGraw Hill, 2010.
4. Blank, L.T., and Tarquin,a.J , Engineering Economy,4th Edn. Mc-Graw Hill, 1988.
5. Patel, B M, Project management- strategic Financial Planning, Evaluation and Control, Vikas Publishing House Pvt. Ltd. New Delhi, 2000.
6. Shrivastava,U.K., Construction Planning and Management,2nd Edn. Galgotia Publications Pvt. Ltd. New Delhi, 2000.
7. Steiner, H.M.,Engineering Economic principles, 2nd Edn. Mc-Graw Hill Book, New York, 1996.

OBJECTIVES:

- To create an awareness on the various environmental issues in an urban scenario and give an exposure to the urban water resources and its management.
- To impart knowledge on the stages of works involved in a water supply project of a city, safe wastewater collection system for generated wastewater and its management, solid waste and their safe disposal beyond urban limit to be free from pollution is also addressed in the course work.

UNIT I URBAN ENVIRONMENTAL ISSUES 9

Urbanization- Population growth scenario -Migration - Pollution of surface water resources - Rivers, tanks, channels -Ground water exploitation - Waste water -Characteristics -Pollution problems - Solid waste -Air pollution - CPCB norms.

UNIT II URBAN MASTER PLANS 9

Planning and organizational aspects -Urban waste resources management - Water in urban ecosystem -Urban water resources planning and organization aspects -Storm water management practices -Types of storage -Magnitude of storage -Storage capacity of urban components - Percolation ponds -Temple tanks -Rainwater harvesting -Urban water supply - Demand estimation -Population forecasting -Source identification -Water conveyance -Storage reservoirs -Fixing storage capacity - Distribution network -Types -Analysis -Computer applications - Conservation techniques -Integrated urban water planning - Smart city project planning - Green Building - LEED certification - Green audit

UNIT III URBAN WASTEWATER MANAGEMENT 9

Sewage generation -Storm drainage estimation -Industry contribution -Wastewater collection system -Separate and combined system -Hydraulic design of sewer and storm drain -Wastewater treatment -Disposal methods -Concept of decentralization - 3R concepts.

UNIT IV MUNICIPAL SOLID WASTE MANAGEMENT 9

Sources of solid waste -Characteristics -Rate of generation -Segregation at source -Collection of solid waste -Methods of collection -Route analysis -Transfer and transfer stations -Processing and disposal of solid waste.

UNIT V CASE STUDIES 9

Environmental economics- Social and physiological aspects of pollution - Successful urban management -Models- Urban management-Case studies from developed nations -Software.

TOTAL :45 PERIODS**OUTCOMES:**

On successful completion of the course, students will be able to

- understand planning of a city and identify various urban environmental issues
- apply and prepare project plans to integrate urban water resource
- develop water resource management using available water resources
- understand and apply the principles of solid waste management

REFERENCES

1. George Tchobanoglous, Hilary Theisen and Samuel A, Vigil "Integrated Solid Waste Management", McGraw Hill Publishers, New York, 1993.
2. McGhee J., "Water supply and sewerage", McGraw Hill Publishers, 1991
3. Martin P. Wanelista and Yousef. "Storm Water Management and Operations", John Wiley and Sons, 1993.
4. Neil S. Grigg., "Urban Water Infrastructure Planning – Management and Operations", John Wiley and Sons, 1986.

OBJECTIVE:

- To give an exposure on the advanced materials, techniques and equipments used in infrastructure industry.

UNIT I SPECIAL CONCRETES**9**

Concrete -Behavior of concrete - High strength and high performance concrete - Fibre reinforced concrete - Self compacting concrete - Bacterial concrete -Reactive powder concrete - Ready mix concrete -Geopolymer concrete -Alternative materials for concrete.

UNIT II METALS**9**

Steels - New alloy steels - Coatings to reinforcement - Cold formed steel -Aluminum and its products -Applications. Composites: Plastics - Reinforced polymers- FRP -Applications. Smart and intelligent materials: smart and intelligent materials for intelligent buildings - Special features.

UNIT III ADVANCED CONSTRUCTION TECHNIQUES**9**

Sub structure construction: Box jacking- Pipe jacking- Under water construction of diaphragm walls and basement- Tunneling techniques-Cable anchoring and grouting- Driving diaphragm walls, sheet piles, laying operations for built up offshore system- Shoring for deep cutting- Large reservoir construction -Trenchless technology.

UNIT IV SUPERSTRUCTURE CONSTRUCTION FOR BUILDINGS**9**

Vacuum dewatering of concrete flooring- Concrete paving technology- Techniques of construction for continuous concreting operation in tall buildings of various shapes and varying sections - Launching techniques suspended form work -Erection techniques of tall structures, large span structures- Launching techniques for heavy decks -Inset pre-stressing in high rise structures, aerial transporting, handling, erecting lightweight components on tall structures.

UNIT V CONSTRUCTION OF SPECIAL STRUCTURES**9**

Erection of lattice towers and rigging of transmission line structures- Construction sequence in cooling towers, silos, chimney, sky scrapers, bow string bridges, cable stayed bridges - Launching and pushing of box decks -Advanced construction techniques of offshore structures- Construction sequence and methods in domes and prestress domes -Support structure for heavy equipment and conveyor and machinery in heavy industries -Erection of articulated structures, braced domes and space decks. Demolition Techniques -Advanced techniques and sequence in demolition and dismantling.

TOTAL :45 PERIODS**OUTCOMES:**

On successful completion of the course, students will be able to

- explain the properties and applications of special concretes, composites, smart and intelligent materials
- identify and explain advanced construction techniques used for sub structure construction
- select appropriate techniques for super structure construction of buildings
- select suitable techniques for construction of special structures
- choose relevant technique for demolition and dismantling works

REFERENCES

- Jerry Irvine, "Advanced Construction Techniques", C.A. Rocketr, 1984
- Patrick Powers, "Construction Dewatering: New Methods and Applications", John Wiley & Sons, 1992
- Robertwade Brown, "Practical foundation Engineering handbook", McGraw Hill Publications, 1995.
- Sankar S.K. and Saraswathi. S, "Construction Technology", Oxford University Press, New Delhi, 2008.

OBJECTIVE:

- To provide the participants with a good knowledge on strategic planning and marketing in airport organizations.

UNIT I INTRODUCTION TO AIRPORT INFRASTRUCTURE**9**

Growth of air transport, Airport organization and associations, Classification of airports airfield components, Air traffic zones and approach areas. Context of airport system planning - Development of airport planning process - Ultimate consumers - Airline decision - Other airport operations.

UNIT II AIRPORT INFRASTRUCTURE CAPACITY DESIGN**9**

Components, size, turning radius, speed, airport characteristics. Capacity and Delay - Factors affecting capacity, determination of runway capacity related to delay, gate capacity and taxiway capacity.

UNIT III AIRPORT INFRASTRUCTURE PLANNING AND SURVEYS**9**

Runway length and width, sight distances, longitudinal and transverse, runway intersections, taxiways, clearances, aprons, numbering, holding apron. Planning and design of the terminal area: Operational concepts, space relationships and area requirements, noise control, vehicular traffic and parking at airports. Air traffic control and aids: Runways and taxiways markings, day and night landing aids, airport lighting and other associated aids.

UNIT IV AIRPORT INFRASTRUCTURE ENTERPRISE**9**

The economic impact on countries and regions - the main governance patterns in the airport business - The International path of evolution in the airport business - Airport transport value chain - Air enterprises - two primary actors in the air transport value chain - Skipping peripheral positions in the value chain. Rise of airport marketing for the aviation related business - Airport revenue management- Airport alliances- management contract.

UNIT V THE DEVELOPMENT OF THE NON AVIATION INFRASTRUCTURE**9**

Related value Proposition. Evolution of traditional Airport - Evolutionary patterns for airport enterprises- Commercial Airport Philosophy - tourist and conference service - logistic services- property management- consulting services - BAA and the non aviation business - best airport in the world: The case of Singapore Airport - Role and meaning of loyalty for a service company- Bench marking airline experience - Provider - Customer relational link - benefits from ALPS implementation of ALPS.

TOTAL :45 PERIODS**OUTCOMES :**

On the successful completion of the course, students will be able to:

- explain the classification of airports airfield components
- explain the main governance patterns in the airport business
- identify the evolutionary patterns for airport enterprises.
- explain the primary actors in the air transport value chain

REFERENCES

- Aviation Safety Programs A Management Hand Book: Richard H. Wood - Jeppesen Sanderson Inc.
- Airport Systems,: Planning, Design and Management, Second Edition, Richard L. De Neufville , Amedeo R. Odoni, Peter Belobaba,& Tom G. Reynolds), 2013.
- Airport Planning and Management, Sixth Edition, Seth B. Young, Ph.D., Alexander T. Wells, Ed.D., McGraw-Hill Education, 2011.
- Asset and Infrastructure Management for Airports—Primer and Guidebook, The national academic press.

OBJECTIVE:

- To provide the participants with a good knowledge on real estate marketing and management.

UNIT I CONCEPT**9**

Fundamental concepts and techniques involved in real estate development process- Role of various organizations - CREDAI- BAI etc

UNIT II EVENTS AND PRE-PROJECT STUDIES**9**

Modeling sequential events in real estate development process - Site evaluation - Land procurement - Development Team assembly - Market study

UNIT III DEVELOPMENT PLANNING & APPROVAL PROCESS**9**

Identifying technical inputs required, planning objectives, front end clearances from various authorities, timing of the project and scheduling

UNIT IV CONSTRUCTION AND PROJECT MANAGEMENT**9**

Identifying the elements of infrastructure and the resource mobilization, disaggregating the project components, mobilizing the human and fiscal resources procuring and storing materials

UNIT V PROJECT MARKETING & HANDING OVER**9**

Over of the completed project- Communication tools required for presenting the project -In house sales promotion -Franchisee system -Joint venture and sharing issues - Procedure and laws relating to transfer of completed project.

TOTAL :45 PERIODS**OUTCOMES:**

On successful completion of the course, students will be able to

- Explain the fundamental concepts and techniques involved in real estate development process
- Explain the procedure and laws relating to transfer of completed project
- Identify the fiscal resources procuring and storing materials process.

REFERENCES:

- Gerald R. Cortesi, "Mastering real estate principles" (2001); Dearborn Trade Publishing, New York, USA.
- Fillmore W Galaty, "Modern real estate practice" (2002); Dearborn Trade publishing, New York, USA
- Tanya Davis, "Real estate developer's handbook" (2007), Atlantic pub company, Ocala, USA.
- Mike E. Miles, "Real estate development - Principles & process 3rd edition" (2000); Urban Land Institute, ULI, Washington DC.

OBJECTIVES:

- To develop and strengthen entrepreneurial quality and motivation in students.
- To impart basic entrepreneurial skills and understandings to run a business efficiently and effectively.

UNIT I ENTREPRENEURIAL COMPETENCE**9**

Entrepreneurship concept - Entrepreneurship as a Career - Entrepreneurial Personality - Characteristics of Successful, Entrepreneur - Knowledge and Skills of Entrepreneur.

UNIT II ENTREPRENEURIAL ENVIRONMENT**9**

Business Environment - Role of Family and Society - Entrepreneurship Development Training and Other Support Organizational Services - Central and State Government Industrial Policies and Regulations - International Business.

UNIT III BUSINESS PLAN PREPARATION**9**

Sources of Product for Business - Prefeasibility Study - Criteria for Selection of Product - Ownership - Capital - Budgeting Project Profile Preparation - Matching Entrepreneur with the Project - Feasibility Report Preparation and Evaluation Criteria.

UNIT IV LAUNCHING OF SMALL BUSINESS**9**

Finance and Human Resource Mobilization Operations Planning - Market and Channel Selection - Growth Strategies - Product Launching -Incubation, Venture capital, IT startups.

UNIT V MANAGEMENT OF SMALL BUSINESS**9**

Monitoring and Evaluation of Business - Preventing Sickness and Rehabilitation of Business Units- Effective Management of small Business.

TOTAL :45 PERIODS**OUTCOME:**

Students will gain knowledge and skills needed to start and run an enterprise.

REFERENCES

1. Hisrich, Entrepreneurship, Tata McGraw Hill, New Delhi, 2001.
2. S.S.Khanka, Entrepreneurial Development, S.Chand and Company Limited, New Delhi, 2001.
3. Mathew Manimala, Entrepreneurship Theory at the Crossroads, Paradigms & Praxis, Biztrantra ,2nd Edition ,2005
4. Prasanna Chandra, Projects – Planning, Analysis, Selection, Implementation and Reviews, Tata McGraw-Hill, 1996.
5. P.Saravanavel, Entrepreneurial Development, Ess Pee kay Publishing House, Chennai -1997.
6. Arya Kumar. Entrepreneurship. Pearson. 2012
7. Donald F Kuratko, T.V Rao. Entrepreneurship: A South Asian perspective. Cengage Learning. 2012

OBJECTIVE:

- To gain knowledge about the valuation of different infrastructure assets

UNIT I REAL ESTATE VALUATION

9

Scope and objectives -Concepts of valuation - Types of value - Value vs Price vs Cost-Different methods of valuation- SWOT analysis

UNIT II APPROACHES TO REAL ESTATE VALUATION

9

Sales comparison approach - Cost approach - Income approach - SWOT analysis

UNIT III VALUATION OF VARIOUS CATEGORIES OF REAL ESTATE

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Residential real estate valuation - Commercial real estate valuation - Industrial real estate valuation - Retail real estate valuation- Mixed-use real estate valuation

UNIT IV INFRASTRUCTURE ASSET VALUATION

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Objective and approaches-Different categories of infrastructure assets- Valuation methodology- Key operational and financial parameters -Valuation framework and models.

UNIT V SECTORAL INFRASTRUCTURE VALUATION

9

Power sector- IT sector - Telecom sector - Aviation-Education sector- Other service sectors- Plant and Machinery -Case studies

TOTAL :45 PERIODS**OUTCOME:**

- Students will gain knowledge and skills in connection to the valuation of different types of real estates and infrastructure assets.

REFERENCES :

- Infrastructure valuation –Frederic Blanc - Brude and Majid Hasan, EDHEC Risk Institute
- Infrastructure Asset Management - Frederic Blanc - Brude and Majid Hasan, EDHEC Risk Institute
- Valuation techniques for infrastructure investment decisions, Michael J. Garvin, Department of Civil Engineering and Engineering Mechanics , Columbia University
- <https://www.thebalance.com/different-types-of-real-estate-investments-you-can-make-357986>
- http://rbsa.in/valuation_of_infrastructure_assets_specialized_assets.html
- http://edhec.infrastructure.institute/wp-content/uploads/publications/blanc-brude_2015a.pdf
- Application of Real Options in Infrastructure Projects Charles Y.J. Cheah, PhD, CFA


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