

**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	
<b>YEAR 1</b>	<b>SEM 1</b>	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	✓		✓							
	<b>SEM 2</b>	Applied Operations Research		✓				✓		✓		
		Business Research Methods		✓				✓		✓		
		Financial Management	✓	✓		✓	✓			✓		✓
		Human Resource Management	✓	✓		✓	✓			✓		✓
		Information Management	✓	✓		✓	✓			✓		✓
		Operations Management	✓	✓		✓	✓			✓		✓
		Marketing Management		✓		✓	✓			✓		
Data Analysis and Business Modeling					✓	✓	✓				✓	
<b>YEAR 2</b>	<b>SEM 3</b>	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	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	<b>SEM 4</b>	Project Work	✓	✓	✓	✓	✓	✓	✓	✓	✓	

			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
	<b>Stream/ Specialization : Marketing Management</b>										
	Brand Management		✓		✓		✓			✓	✓
	Consumer Behaviour		✓				✓	✓	✓	✓	✓
	Customer Relationship Management		✓				✓	✓	✓	✓	✓
	Integrated Marketing Communication		✓		✓		✓				✓
	Retail Marketing		✓		✓		✓			✓	✓
	Services Marketing		✓				✓	✓	✓		✓
	Social Marketing		✓				✓	✓	✓	✓	✓
	<b>Stream/ Specialization : Financial Management</b>										
	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		✓		✓		✓			✓	✓
	<b>Stream/ Specialization : Human Resource Management</b>										
	Entrepreneurship Development		✓		✓		✓			✓	✓
	Industrial Relations and Labour Welfare		✓		✓		✓			✓	✓
	Labour Legislations		✓		✓			✓			✓
	Managerial Behaviour and Effectiveness				✓		✓			✓	✓
	Organizational Theory, Design and Development		✓		✓		✓			✓	✓
	Strategic Human Resource Management				✓			✓			✓
	<b>Stream/ Specialization : Systems Management</b>										
	Advanced Database Management System		✓	✓	✓		✓	✓	✓		✓
	Data mining for Business Intelligence		✓		✓			✓			✓
	E-Business Management		✓					✓			✓

		Software Project Management and Quality								
		Enterprise Resource Planning	✓				✓			✓ ✓
	<b>Stream/ Specialization : Operations Management</b>									
		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
<b>THEORY</b>								
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
<b>PRACTICALS</b>								
8	BA5111	Spoken and Written Communication #	EEC	4	0	0	4	2
<b>TOTAL</b>				<b>27</b>	<b>23</b>	<b>0</b>	<b>4</b>	<b>25</b>

# No end semester examination is required for this course.

**SEMESTER - II**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
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
<b>PRACTICALS</b>								
8	BA5211	Data Analysis and Business Modelling	EEC	4	0	0	4	2
<b>TOTAL</b>				<b>26</b>	<b>22</b>	<b>0</b>	<b>4</b>	<b>24</b>

**SEMESTER - III**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
<b>THEORY</b>								
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
<b>PRACTICALS</b>								
9	BA5311	Summer Training	EEC	2	0	0	2	1
<b>TOTAL</b>				<b>26</b>	<b>24</b>	<b>0</b>	<b>2</b>	<b>25</b>

\*\*\* 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
<b>PRACTICALS</b>								
1.	BA5411	Project Work	EEC	24	0	0	24	12
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>	

**TOTAL NO. OF CREDITS:86**

**PROFESSIONAL CORE (PC)**

<b>SL. NO.</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CATEGORY</b>	<b>CONTACT PERIODS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
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
<b>Stream/ Specialization : Marketing Management</b>								
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
<b>Stream/ Specialization : Financial Management</b>								
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
<b>Stream/ Specialization : Human Resource Management</b>								
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
<b>Stream/ Specialization : Systems Management</b>								
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
<b>Stream/ Specialization : Operations Management</b>								
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
<b>Sectoral Specialization : Logistics and Supply Chain Management</b>								
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
<b>Sectoral Specialization :Infrastructure and Real Estate Management</b>								
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)**

<b>SL. NO.</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CATEGORY</b>	<b>CONTACT PERIODS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
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 :**

- Paul A. Samuelson, William D. Nordhaus, Sudip Chaudhuri and Anindya Sen, Economics, 19<sup>th</sup> edition, Tata McGraw Hill, New Delhi, 2010.
- William Boyes and Michael Melvin, Textbook of economics, Biztantra, 9<sup>th</sup> Edition, 2012.
- N. Gregory Mankiw, Principles of Economics, 7th edition, Cengage, New Delhi, 2014
- Richard Lipsey and Alec Charystal, Economics, 12<sup>th</sup> edition, Oxford, University Press, New Delhi, 2011.
- 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, 9<sup>th</sup> edition, 2012.
- Samuel C. Certo and Tervis Certo, Modern management: concepts and skills, Pearson education, 12<sup>th</sup> edition, 2012.
- Harold Koontz and Heinz Weihrich, Essentials of management: An International & Leadership Perspective, 9<sup>th</sup> edition, Tata McGraw-Hill Education, 2012.
- Don Hellriegel, Susan E. Jackson and John W. Slocum, Management- A competency-based approach, Thompson South Western, 11<sup>th</sup> edition, 2008.
- Heinz Weihrich, Mark V Cannice and Harold Koontz, Management- A global entrepreneurial perspective, Tata McGraw Hill, 13<sup>th</sup> 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, 15<sup>th</sup> 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, 8<sup>th</sup> 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, 2<sup>nd</sup> edition, Cengage, 2011
9. Godwin, Alderman, Sanyal , Financial Accounting, 2<sup>nd</sup> 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 2008, 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.

<b>UNIT I</b>	<b>FOCUS AND PURPOSE</b>	<b>5</b>
Definition, need and importance of organizational behaviour – Nature and scope – Frame work – Organizational behaviour models.		
<b>UNIT II</b>	<b>INDIVIDUAL BEHAVIOUR</b>	<b>12</b>
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.		
<b>UNIT III</b>	<b>GROUP BEHAVIOUR</b>	<b>10</b>
Organization structure – Formation – Groups in organizations – Influence – Group dynamics – Emergence of informal leaders and working norms – Group decision making techniques – <b>Team building</b> - Interpersonal relations – Communication – Control.		
<b>UNIT IV</b>	<b>LEADERSHIP AND POWER</b>	<b>8</b>
Meaning – Importance – Leadership styles – Theories – Leaders Vs Managers – Sources of power – Power centers – Power and Politics.		
<b>UNIT V</b>	<b>DYNAMICS OF ORGANIZATIONAL BEHAVIOUR</b>	<b>10</b>
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, 12<sup>th</sup> Edition,
- Mc Shane & Von Glinov, Organisational Behaviour, 4<sup>th</sup> Edition, Tata Mc Graw Hill, 2007.
- Nelson, Quick, Khandelwal. ORGB – An innovative approach to learning and teaching. Cengage, 2<sup>nd</sup> edition. 2012
- Ivancevich, Konopaske & Maheson, Oranisational Behaviour & Management, 7<sup>th</sup> edition, Tata McGraw Hill, 2008.
- Udai Pareek, Understanding Organisational Behaviour, 3<sup>rd</sup> Edition, Oxford Higher Education, 2011.
- Jerald Greenberg, Behaviour in Organization, PHI Learning. 10<sup>th</sup> 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:**

- Richard I. Levin, David S. Rubin, Sanjay Rastogi Masood Husain Siddiqui, Statistics for Management, Pearson Education, 7th Edition, 2016.
- Prem.S.Mann, Introductory Statistics, 7th Edition, Wiley India, 2016.
- Gareth James, Daniela Witten, Trevor Hastie, Robert Tibshirani, An Introduction to Statistical Learning with Applications in R, Springer, 2016.
- Aczel A.D. and Sounderpandian J., "Complete Business Statistics", 6th edition, Tata McGraw Hill Publishing Company Ltd., New Delhi, 2012.
- Anderson D.R., Sweeney D.J. and Williams T.A., Statistics for business and economics, 11th edition, Thomson (South – Western) Asia, Singapore, 2012.
- N. D. Vohra, Business Statistics, Tata McGraw Hill, 2012.
- 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, 4<sup>th</sup> 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, 11<sup>th</sup> ed. Tata McGraw-Hill, New Delhi.
2. E.H. McGrath, S.J. 2012, Basic Managerial Skills for All. 9<sup>th</sup> 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 , 12<sup>th</sup> 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, 11<sup>th</sup> Edition, Tata Mc Graw Hill, New Delhi, 2012.
2. Alan Bryman and Emma Bell, Business Research methods, 3<sup>rd</sup> Edition, Oxford University Press, New Delhi, 2011.
3. Uma Sekaran and Roger Bougie, Research methods for Business, 5<sup>th</sup> 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, 8<sup>th</sup> 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, 6<sup>th</sup> edition, 2011.
2. M. Pandey Financial Management, Vikas Publishing House Pvt. Ltd., 10<sup>th</sup> edition, 2012.
3. Aswat Damodaran, Corporate Finance Theory and practice, John Wiley & Sons, 2011.
4. James C. Vanhorne –Fundamentals of Financial Management– PHI Learning, 11<sup>th</sup> Edition, 2012.
5. Prasanna Chandra, Financial Management, 9<sup>th</sup> 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, 7<sup>th</sup> Edition, Cengage, 2014 .
10. Brigham and Ehrhardt, Financial Management, 14<sup>th</sup> 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 :**

1. Dessler Human Resource Management, Pearson Education Limited, 14th Edition, 2015.
2. Decenzo and Robbins, Fundamentals of Human Resource Management, Wiley, 11<sup>th</sup> Edition, 2013.
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 ,8<sup>th</sup> edition 2012.
5. Wayne Cascio, Managing Human Resource, McGraw Hill, 2007.
6. Ivancevich, Human Resource Management, McGraw Hill 2012.
7. 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 :**

1. 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, 21<sup>st</sup> Reprint 2008.
5. Haag, Cummings and Mc Cubbrey, Management Information Systems for the Information Age, McGraw Hill, 2005. 9<sup>th</sup> edition, 2013.
6. Turban, McLean and Wetherbe, Information Technology for Management –Transforming Organisations in the Digital Economy, John Wiley, 6<sup>th</sup> 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. Ralph Stair and George Reynolds, Information Systems, Cengage Learning, 10<sup>th</sup> 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, 4<sup>th</sup> 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, 12<sup>th</sup> Edition, 2010.
2. Norman Gaither and Gregory Frazier, Operations Management, South Western Cengage, 2002.
3. William J Stevenson, Operations Management, Tata McGraw Hill, 11<sup>th</sup> Edition, 2015.
4. Russel and Taylor, Operations Management, Wiley, 8th Edition, 2015.
5. Kanishka Bedi, Production and Operations Management, Oxford University, 3<sup>rd</sup> Edition, 2013.
6. Chary S. N, Production and Operations Management, Tata McGraw Hill, 5<sup>th</sup> 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, 3<sup>rd</sup> Edition, 2015
9. Pannerselvam 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 14<sup>th</sup> 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, 2<sup>nd</sup> 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" (6<sup>th</sup> Edition) Pearson, 2010
2. David R. Anderson, et al, 'An Introduction to Management Sciences: Quantitative approaches to Decision Making, (13<sup>th</sup> 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, 3<sup>rd</sup> 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, 6<sup>th</sup> 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, 6<sup>th</sup> Edition, Tata Mc Graw Hill, New Delhi, 2015.
4. Michael R. Czinkota, Ilkka A. Ronkainen and Michael H. Moffet, International Business, 7<sup>th</sup> Edition, Cengage Learning, New Delhi, 2010.
5. Rakesh Mohan Joshi, International Business, Oxford University Press, New Delhi, 2009.
6. Vyuptakesh Sharan, International Business, 3<sup>rd</sup> 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**

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, 3<sup>rd</sup> Edition, Tata McGraw Hill,2008
4. Adriaue Haberberg 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, 12<sup>th</sup> 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.

<b>UNIT I</b>	<b>INTRODUCTION</b>	<b>9</b>
Definitions - Concepts and Context of relationship Management – Evolution - Transactional Vs Relationship Approach – CRM as a strategic marketing tool – CRM significance to the stakeholders.		
<b>UNIT II</b>	<b>UNDERSTANDING CUSTOMERS</b>	<b>9</b>
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.		
<b>UNIT III</b>	<b>CRM STRUCTURES</b>	<b>9</b>
Elements of CRM – CRM Process – Strategies for Customer acquisition – Retention and Prevention of defection – Models of CRM – CRM road map for business applications.		
<b>UNIT IV</b>	<b>CRM PLANNING AND IMPLEMENTATION</b>	<b>9</b>
Strategic CRM planning process – Implementation issues – CRM Tools- Analytical CRM – Operational CRM – Call center management – Role of CRM Managers.		
<b>UNIT V</b>	<b>TRENDS IN CRM</b>	<b>9</b>
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, 6<sup>th</sup> 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 :**

1. George E Belch and Michel A Belch, Advertising & Promotion, Tata McGraw Hill, 10th edition, 2014
2. Wells, Moriarty & Burnett, Advertising, Principles & Practice, Pearson Education, 7th Edition, 2007.
3. Kenneth Clow. Donald Baack, Integrated Advertisements, Promotion and Marketing communication, Prentice Hall of India, New Delhi, 3rd Edition, 2006.
4. Terence A. Shimp and J.Craig Andrews, Advertising Promotion and other aspects of Integrated Marketing Communications, CENGAGE Learning, 9th edition, 2016
5. S. H. H. Kazmi and Satish K Batra, Advertising & Sales Promotion, Excel Books, New Delhi, 3rd Revised edition edition, 2008.
6. Julian Cummings, Sales Promotion: How to Create, Implement and Integrate Campaigns that Really Work, Kogan Page, London, Fifth Edition Edition ,2010.
7. Jaishri Jefhwaney, 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 atmospheric – 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, 7<sup>th</sup> edition, 2011.
2. Hoffman, Marketing of Services, Cengage, 4<sup>th</sup> Edition, 2010.
3. Kenneth E Clow, et al, Services Marketing Operation Management and Strategy, Biztantra, 2<sup>nd</sup> Edition, New Delhi, 2004.
4. Valarie Zeithaml et al, Services Marketing, 5<sup>th</sup> International Edition, Tata McGraw Hill, 2007.
5. Gronroos, Service Management and Marketing –Wiley India, 3<sup>rd</sup> 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.

## **UNIT II SOCIAL MARKETING PROCESS AND PLANNING 9**

Introduction - Environment Monitoring - Social Class and self-efficacy - social capital - Social ecology - Advocacy - A global phenomenon - Social marketing Process - Stages - Ethical considerations. Planning - Formative Research in Social marketing. Analysis - Problem - Environment - Resource.

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.

## **UNIT III SOCIAL MARKETING MIX 9**

Social marketing mix - policy - product - place - price - promotion - people - partnership. Rating & Reviews - Virtual world - Using media in social marketing - Importance - effectiveness of mass media in social marketing - Practical model for media use in social marketing - Advertisement - Publicity - Edutainment - Civic or Public - Choosing media & methods.

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.

## **UNIT IV ETHICAL ISSUES AND CHALLENGES 9**

Ethical principles - Codes of behaviour - Critics of social marketing - Critic of power imbalance in social marketing - Criticism of unintended consequences - Competition in social marketing- Definition - monitoring - countering competition - competition and principle of differential advantage - Internal competition.

## **UNIT V TRENDS IN SOCIAL MARKETING 9**

Future of Social marketing - setting priorities in social marketing - Repositioning strategies- Future of Public sector – NGO – Private sector social marketing.

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

**TOTAL: 45 PERIODS**

### **OUTCOME:**

- Applying Ethical Principles in Social Marketing through advanced marketing medias

### **REFERENCES :**

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 21<sup>st</sup> 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, 10<sup>th</sup> 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- Interdependence 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, 9<sup>th</sup> Edition, 2011
2. I.M.Pandey, Financial Management, Vikas Publishing House Pvt., Ltd., 12<sup>th</sup> 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, 6<sup>th</sup> 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, 10<sup>th</sup> 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, 9<sup>th</sup> 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, 2<sup>nd</sup> 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, FII, 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, 12<sup>th</sup> 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, 10<sup>th</sup> 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, 8<sup>th</sup> edition, 2011.
2. Prasannachandra, Investment analysis and Portfolio Management, Tata McGraw Hill, 2011.
3. Reilly & Brown, Investment Analysis and Portfolio Management, Cengage, 10<sup>th</sup> 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:**

- Hisrich, Entrepreneurship, Edition 9, Tata McGraw Hill, New Delhi, 2014
- S.S.Khanka, Entrepreneurial Development, S.Chand and Company Limited, New Delhi, (Revised Edition) 2013.
- Mathew Manimala, Entrepreneurship Theory at the Crossroads, Paradigms & Praxis, Biztrantra, 2<sup>nd</sup> Edition, 2005
- Prasanna Chandra, Projects – Planning, Analysis, Selection, Implementation and Reviews, Tata McGraw-Hill, 1996.
- P.Saravanavel, Entrepreneurial Development, Ess Pee kay Publishing House, Chennai
- 1997.
- Arya Kumar. Entrepreneurship. Pearson, 2012.
- 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.

<b>UNIT I</b>	<b>DEFINING THE MANAGERIAL JOB</b>	<b>8</b>
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.		
<b>UNIT II</b>	<b>DESIGNING THE MANAGERIAL JOB</b>	<b>12</b>
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.		
<b>UNIT III</b>	<b>THE CONCEPT OF MANAGERIAL EFFECTIVENESS</b>	<b>7</b>
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.		
<b>UNIT IV</b>	<b>ENVIRONMENTAL ISSUES IN MANAGERIAL EFFECTIVENESS</b>	<b>8</b>
Organisational Processes – Organisational Climate – Leader – Group Influences – Job Challenge – Competition – Managerial Styles.		
<b>UNIT V</b>	<b>DEVELOPING THE WINNING EDGE</b>	<b>10</b>
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 3<sup>rd</sup> edition,2006.
- T.V.Rao,Appraising and Developing Managerial Performance, Excel Books,2002.
- R.M.Omkar, Personality Development and Career Management, S.Chand 1<sup>st</sup>edition,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, 9<sup>th</sup> 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, 6<sup>th</sup> Edition 2011.
7. Richard L. Daft, Understanding theory & Design of Organisations, Cengage, Western, 10<sup>th</sup> 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. 2<sup>nd</sup> 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, 8<sup>th</sup> edition, Cengage,
2. Ramez Elmasri and Shamkant B. Navathe, Fundamentals of Database Systems, 7<sup>th</sup> edition , Pearson Education, 2015.
3. Jeffrey A Hoffer et al, Modern Database Management, 12<sup>th</sup> Edition, Pearson Education, 2016,
4. Abraham Silberchatz, Henry F. Korth and S.Sudarsan, Database System Concepts, 6<sup>th</sup> Edition, McGraw-Hill, 2015.
5. Thomas M. Connolly and Carolyn E. Begg, Database Systems – A Practical Approach to Design, Implementation and Management, 6<sup>th</sup> edition, Pearson Education, 2015.
6. Jeffrey D. Ullman and Jennifer Widom, A First Course in Database Systems, 3<sup>rd</sup> 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, 1<sup>st</sup> edition ,Prentice Hall of India, 2004.
9. Mark L.Gillenson & el, Introduction to database management, 2<sup>nd</sup> edition, Wiley India Pvt. Ltd, 2012
10. Charkrabarti, Advanced Database Management Systems, Wiley India Pvt Ltd, 2011

**OBJECTIVES :**

- To know how to derive meaning form 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, 3<sup>rd</sup> 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, 3<sup>nd</sup> 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, 5<sup>th</sup> 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. Henry 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, 3<sup>rd</sup> Edition. Tata McGraw Hill Publications, 2009
8. Kamlesh K. Bajaj and Debjani Nag, Ecommerce- the cutting edge of Business, Tata McGraw Hill Publications, 7<sup>th</sup> 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, 3<sup>rd</sup> edition 2016
2. Sople Vinod V, Logistics Management – The Supply Chain Imperative, Pearson Education, 3<sup>rd</sup> Edition, 2012.
3. Coyle et al., The Management of Business Logistics, Cengage Learning, 7<sup>th</sup> 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, 5<sup>th</sup> 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, 2<sup>nd</sup> Edition, 2006
4. A.K.Datla, Materials Management, Procedure, Text and Cases, PHI Learning, 2<sup>nd</sup> 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, 2<sup>nd</sup> 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.

**BA5028**

**PROJECT MANAGEMENT**

**L T P C**  
**3 0 0 3**

**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,5<sup>th</sup> Edition 2016
3. Gido and Clements, Successful Project Management, sixth Edition, Cengage, 2015.
4. Harvey Maylor, Project Management, Fourth Edition, Pearson Education, 2010

**BA5029**

**SERVICES OPERATIONS MANAGEMENT**

**L T P C**  
**3 0 0 3**

**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 – 7<sup>th</sup> Edition 2013.
2. Richard Metters, Kathryn King-Metters, Madeleine Pullman, Steve Walton Successful Service Operations Management, South-Western, Cengage Learning, 2<sup>nd</sup> Edition ,2012
3. Cengiz Haksever, Barry Render, Roberta S. Russell, Rebert G. Murdick, Service Management and Operations, Pearson Education – Second Edition.
4. Robert Johnston, Graham Clark, Service Operations Management, Pearson Education, 2<sup>nd</sup> 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, 2<sup>nd</sup> 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, 5<sup>th</sup> 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. Altekar 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.

<b>UNIT - I</b>	<b>DISTRIBUTION</b>	<b>9</b>
Role of Distribution in Supply chain, Distribution channels – Functions, resources, Operations in Distribution, Designing Distribution network models - its features - advantages and disadvantages.		
<b>UNIT - II</b>	<b>PLANNING</b>	<b>9</b>
Distribution network planning, Distribution network decisions, Distribution requirement planning (DRP)		
<b>UNIT - III</b>	<b>TRANSPORTATION</b>	<b>9</b>
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.		
<b>UNIT - IV</b>	<b>TRANSPORTATION</b>	<b>9</b>
International transportation, Carrier, Freight and Fleet management, Transportation management systems-Administration, Rate negotiation, Trends in Transportation.		
<b>UNIT - V</b>	<b>INFORMATION TECHNOLOGY (IT)</b>	<b>9</b>
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 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 - Freighting 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, Chartering: 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.

**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**

### **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**

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

**BA5064**

**CONTRACTS AND ARBITRATION**

**L T P C  
3 0 0 3**

### **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**

**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.iricen.gov.in/doku/lib/exe/fetch.php](http://wiki.iricen.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](http://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.

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 13<sup>th</sup> 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, 19<sup>th</sup> 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:**

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 3<sup>rd</sup> 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

<b>UNIT I</b>	<b>REAL ESTATE VALUATION</b>	<b>9</b>
Scope and objectives -Concepts of valuation - Types of value - Value vs Price vs Cost-Different methods of valuation- SWOT analysis		
<b>UNIT II</b>	<b>APPROACHES TO REAL ESTATE VALUATION</b>	<b>9</b>
Sales comparison approach - Cost approach - Income approach - SWOT analysis		
<b>UNIT III</b>	<b>VALUATION OF VARIOUS CATEGORIES OF REAL ESTATE</b>	<b>9</b>
Residential real estate valuation - Commercial real estate valuation - Industrial real estate valuation - Retail real estate valuation- Mixed-use real estate valuation		
<b>UNIT IV</b>	<b>INFRASTRUCTURE ASSET VALUATION</b>	<b>9</b>
Objective and approaches-Different categories of infrastructure assets- Valuation methodology-Key operational and financial parameters -Valuation framework and models.		
<b>UNIT V</b>	<b>SECTORAL INFRASTRUCTURE VALUATION</b>	<b>9</b>
Power sector- IT sector - Telecom sector - Aviation-Education sector- Other service sectors- Plant and Machinery -Case studies		
<b>TOTAL :45 PERIODS</b>		

**OUTCOME:**

- 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](http://rbsa.in/valuation_of_infrastructure_assets_specialized_assets.html)
6. [http://edhec.infrastructure.institute/wp-content/uploads/publications/blanc-brude\\_2015a.pdf](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