JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY - GURAJADA -VIZIANAGARAM
VIZIANAGARAM 535 003 Andhra Pradesh (India)

ACADEMIC REGULATIONS

COURSE STRUCTURE & DETAILED SYLLABUS

For

MASTER OF BUSINESSADMINISTRATION

(Applicable for the batches admitted from 2025-26)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY GURAJADA VIZIANAGARAM
Dwarapudi (Post), Vizianagram, A.P., India – 535003

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I YEAR I SEMESTER							
S.No	**Course Code**	**Courses**	**Marks**	**L**	**T**	**P**	**C**
1		Management and Organizational Behavior	100	4	0	0	4
2		Managerial Economics	100	4	0	0	4
3		Accounting for Managers	100	4	0	0	4
4		Quantitative Analysis for Business Decisions	100	4	0	0	4
5		Legal and Business Environment	100	4	0	0	4
6		Business Communication and Soft skills	100	4	0	0	4
7		Cross Cultural Management MOOCs : SWAYAM/NPTEL- Related to Management Courses other than listed courses in the syllabus	100	4	0	0	4
8		Business Communication and Soft skills Lab	50	0	0	2	1
9		Information Technology – Lab1(Spreadsheet and Tally)	50	0	0	2	1
		Total	**800**	**28**	**0**	**4**	**30**

I YEAR II SEMESTER							
S.No	**Course Code**	**Courses**	**Marks**	**L**	**T**	**P**	**C**
1		Financial Management	100	4	0	0	4
2		Human Resource Management	100	4	0	0	4
3		Marketing Management	100	4	0	0	4
4		Operations Management	100	4	0	0	4
5		Business Research Methods	100	4	0	0	4
6		Rural Innovation Projects	100	3	0	0	3
7	open elective	Project Management Technology Management Lean Management Database Management System	100	4	0	0	4
8		IT-lab 2(Programming R)	50	0	0	2	1
Total			**750**	**27**	**0**	**2**	**28**

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II YEAR III SEMESTER							
S.No	**Course Code**	**Courses**	**Marks**	**L**	**T**	**P**	**C**
1		Strategic Management	100	4	0	0	4
2		Operations Research	100	4	0	0	4
3		Elective – 1	100	4	0	0	3
4		Elective – 2	100	4	0	0	3
5		Elective – 3	100	4	0	0	3
6		Elective – 4	100	4	0	0	3
7		Industrial Project based on Summer Internship	100	4	0	0	4
Total			**700**	**28**	**0**	**0**	**24**

II YEAR IV SEMESTER							
S.No	**Course Code**	**Courses**	**Marks**	**L**	**T**	**P**	**C**
1		Principles of Event Management	100	4	0	0	4
2		Innovation and Entrepreneurship	100	4	0	0	4
3		Elective – 5	100	4	0	0	3
4		Elective – 6	100	4	0	0	3
5		Elective – 7	100	4	0	0	3
6		Elective – 8	100	4	0	0	3
7		Comprehensive Viva- voce	50	0	0	0	2
Total Marks / Credits			**650**	**24**	**0**	**0**	**22**
			2800				**104**

*The project work documentation shall be checked with anti plagiarism software (Turnitin). The permissible similarity shall be less than 30%.

*Comprehensive Viva is to verify the student knowledge as a whole from which he was studied during the two year course work.

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III SEMESTER
Human Resource Management

S. no	Course Code	SUBJECT TITLE
1		Leadership and Change Management
2		Performance Evaluation and Compensation Management
3		Human Resource Metrics and Analytics
4		Human Capital Management
5		Manpower Planning, Recruitment, and Selection

IV SEMESTER
Human Resource Management

S. no	Course Code	SUBJECT TITLE
6		Labor Welfare and employment laws
7		International HRM
8		Employee Relations and Engagement
9		Human Resources Development
10		Strategic HRM

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III SEMESTER FINANCE

S. no	Course Code	SUBJECT TITLE
1		Investment Analysis and Portfolio Management
2		Managing Banks and Financial Institutions
3		Financial Markets and Services
4		Mergers, Acquisitions and Corporate Restructuring
5		Taxation

IV SEMESTER FINANCE

S. no	Course Code	SUBJECT TITLE
6		Financial Derivatives
7		Global Financial Management
8		Financial Risk Management
9		Strategic Financial Management
10		Behavioral Finance

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III SEMESTER - ELECTIVES
MARKETING

S. no	Course Code	SUBJECT TITLE
1		Consumer Behavior
2		Retail Management
3		Customer Relationship Management
4		Strategic Marketing Management
5		Digital and Social Media Marketing

IV SEMESTER MARKETING

S. no	Course Code	SUBJECT TITLE
6		Services Marketing
7		Promotional and Distribution Management
8		Green Marketing
9		Advertising and Brand Management
10		Global Marketing Management

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III SEMESTER ELECTIVES SYSTEMS

S. no	Course Code	SUBJECT TITLE
1		Data Mining for Business Decisions
2		Managing Software Projects
3		Web Designing
4		Business Analytics
5		Managing Digital Innovation and Transformation

IV SEMESTER SYSTEMS

S. no	Course Code	SUBJECT TITLE
6		Big Data Analytics
7		Enterprise Resource Planning
8		Cyber Laws & Security
9		Information Systems Audit
10		Artificial Intelligence and Machine Learning

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OPERATIONS MANAGEMENT
III SEMESTER

S. no	Course Code	SUBJECT TITLE
1		Service Operations Management
2		Quality Toolkit for Managers
3		Pricing and Revenue Management
4		Operations Strategy
5		Sales and Operations Planning

IV SEMESTER

S. no	Course Code	SUBJECT TITLE
6		Behavioral Operations Management
7		Theory of Constraints
8		Management of Manufacturing Systems
9		Sourcing Management
10		Supply Chain Analytics

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TRAVEL AND TOURISM MANAGEMENT

III SEMESTER

S. no	Course Code	SUBJECT TITLE
1		Travel agency and Tour Operations
2		Hospitality Management
3		Resort Planning and Destination Management
4		Tourism Policy and Planning
5		Recreation Management

IV SEMESTER

S. no	Course Code	SUBJECT TITLE
6		Travel Media and Journalism
7		Event Management
8		Front Office Management
9		Information Technology and Tourism
10		Eco Tourism Practices

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HEALTH CARE AND HOSPITAL MANAGEMENT

III SEMESTER

S. no	Course Code	SUBJECT TITLE
1		Hospital organization and Management
2		Health Care Policies and Delivery Systems
3		Health Economics
4		Hospital Functions and Support Services
5		Revenue Cycle Management

IV SEMESTER

S. no	Course Code	SUBJECT TITLE
6		Patient Care & Services Management
7		Managed Health Care and Insurance
8		Health Laws, Ethics and Regulations
9		Hospital Management Information System
10		Health Analytics

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ENTREPRENEURSHIP AND SMALL ENTERPRISE MANAGEMENT

III SEMESTER

S. no	Course Code	SUBJECT TITLE
1		Indian Models in Entrepreneurship
2		Social Entrepreneurship
3		Business Plan Preparation for Small Business
4		Entrepreneurial Marketing
5		Planning, Structuring, and Financing Small Business

IV SEMESTER

S. no	Course Code	SUBJECT TITLE
6		Marketing for Small Business
7		Finance and Accounting for Small Business
8		Technology Appreciation and Intellectual Property Rights
9		Innovation Technology Management
10		Venture Valuation and Accounting

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AGRO-BUSINESS MANAGEMENT

III SEMESTER

S. no	Course Code	SUBJECT TITLE
		Agro-Marketing Management
2		Agro-Business and Rural Green Market
3		Agro-Business Environment
4		Agro-Supply Chain Management
5		Entrepreneurship for Agriculture

IV SEMESTER

S. no	Course Code	SUBJECT TITLE
6		Food Processing Management
7		Disaster Management
8		Food Retail Management
9		Agro- Technology Management
10		Organic Food Technology

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LOGISTICS AND SUPPLY CHAIN MANAGEMENT

III SEMESTER

S. no	Course Code	SUBJECT TITLE
1		Store keeping and Warehousing management
2		Transportation and Infrastructure Management for SCM
3		Purchasing and Material Management
4		Reverse Logistics
5		Supply Chain Risk Management

IV SEMESTER

S. no	Course Code	SUBJECT TITLE
6		Enterprise Resource Planning
7		International Logistics Management
8		Lean Supply Chain Management
9		Shipping and Maritime law
10		Green Supply Chain Management

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BUSINESS ANALYTICS
III SEMESTER

S. no	Course Code	SUBJECT TITLE
1		Essentials of Business Analytics
2		Text, Social Media& Web Analytics
3		Predictive Analytics
4		Big Data Analytics
5		Marketing Analytics

IV SEMESTER

S. no	Course Code	SUBJECT TITLE
6		Financial Analytics
7		HR Analytics
8		Econometrics and Business Forecasting
9		Data Warehousing and OLAP
10		Data Mining& Machine learning

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SYLLABUS

	Management and Organizational Behavior	**100**	**4**	**0**	**0**	**4**

Objective:
Objective of the course is to give a basic perspective of Management. This will form foundation to study other functional areas of management and to provide the students with the conceptual framework and the theories underlying Organizational Behaviour.

Unit – I
Definition, Nature, Functions and Importance of Management – Evolution of Management thought – Scientific management, administrative management, Haw throne experiments – systems approach - Levels of Management - Managerial Skills - Planning – Steps in Planning Process – importance and Limitations – Types of Plans - Characteristics of a sound Plan - Management By Objectives (MBO) - Techniques and Processes of Decision Making - Social Responsibilities of Business

Unit-II
Organizing – Principles of organizing – Organization Structure and Design – Types of power - Delegation of Authority and factors affecting delegation – Span of control – Decentralization – Line and staff structure conflicts - Coordination definition and principles - Emerging Trends in Corporate Structure – Formal and Informal Organization- Nature and importance of Controlling, process of Controlling, Requirements of effective control and controlling techniques.

Unit – III
Organizational behavior: Nature and scope – Linkages with other social sciences – Individual roles and organizational goals – perspectives of human behavior - Perception– perceptual process – Learning - Learning Process- Theories - Personality and Individual Differences - Determinants of Personality - Values, Attitudes and Beliefs - Creativity and Creative thinking.

Unit – IV
Motivation and Job Performance – Content and process Theories of Motivation - Leadership - Styles - Approaches – Challenges of leaders in globalized era – Groups – stages formation of groups – Group Dynamics - Collaborative Processes in Work Groups - Johari Window- Transactional Analysis.

Unit – V:
Organizational conflict-causes and consequences-conflict and Negotiation Team Building, Conflict Resolution in Groups and problem solving Techniques – Organizational change - change process - resistance to change - Creating an Ethical Organization.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Harold Koontz, Heinz Weihrich, A.R.Aryasri, Principles of Management, TMH, 2010.
2. Dilip Kumar Battacharya, Principles of Management, Pearson, 2012.
3. Kumar, Rao, Chhaalill –Introduction to Management Science‖ Cengage Publications,New Delhi
4. V.S.P.Rao, Management Text and Cases, Excel, Second Edition, 2012.
5. K.Anbuvelan, Principles of Management, University Science Press, 2013.
6. K.Aswathappa ― Organisational Behaviour-Text, Cases and Games‖, Himalaya Publishing House,

New Delhi,2008.

7. Steven L Mc Shane, Mary Ann Von Glinow, Radha R Sharma: ―Organisational Behaviour‖, TMH Education, New Delhi,2008

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	Managerial Economics	**100**	**4**	**0**	**0**	**4**

Objective: This subject seeks to equip the students with the analytical tools of Economics and apply the same to rational managerial decision-making. It further seeks to develop economic way of thinking in dealing with practical business problems and challenge.

UNIT-I:
Introduction to Managerial Economics: Nature and Scope- Fundamental Concepts: Incremental reasoning, Concept of Time Perspective, Discounting Principle, Opportunity Cost Principle, Equi -Marginal Concept,-Theory of Firm.

UNIT-II:
Demand Analysis and Forecasting: Concepts of Demand, Supply, Determinants of Demand and Supply, Elasticity's of Demand and Supply- Methods of demand forecasting for established and new products.

UNIT-III:
Cost and Production Analysis: Cost: Concept and types, Cost-Output Relationships, Cost Estimation, Reduction and Control- Economies and Diseconomies of Scale- Law of Variable Proportions- Returns to Scale- Isoquants-Cobb- Douglas and CES Production functions.

UNIT-IV:
Theory of Pricing: Price determination under Perfect Competition, Monopoly, Oligopoly and Monopolistic Competitions- Methods of Pricing- Game Theory basics- Dominant Strategy-Nash Equilibrium and Prisoner's Dilemma.

UNIT-V:
Macro Economics and Business: Concept, Nature and Measurement of National Income-Inflation and Deflation: Inflation - Meaning and Kinds, Types, Causes and measurement of inflation Measures to Control Inflation, Deflation- - Philips curve-Stagflation-Theory of Employment- Business cycles: Policies to counter Business Cycles.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. D.M.Mithani, Managerial Economics, Himalaya Publishing House
2. H.Craig Peterson, W.Cris Lewis, Managerial Economics, Pearson, 2005.
3. Gupta G.S., Managerial Economics, TMH, 1988.
4. P.L. Mehta, Managerial Economics, PHI, 2001.
5. K .K Dawett, Modern Economic Theory, Sultan Chand & Sons.
6. D.N. Dwivedi, Managerial Economics, 7th Ed, Vikas Publishing.
7. Rangarajan and Dholkia, Macroeconomics, TMH.

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	Accounting for Managers	**100**	**4**	**0**	**0**	**4**

Objective:
The objective of this course is to acquaint the students regarding various accounting concepts and its application in managerial decision making.

Unit – I:
Financial Accounting- concept, Importance and scope, accounting principles, accounting cycle, journal ledger, trial balance, Preparation of final accounts with adjustments.

Unit – II:
Analysis and interpretation of financial statements – meaning, importance and techniques, ratio analysis, Fund flow analysis, cash flow analysis (AS - 3).

Unit – III:
Cost accounting–meaning, importance, methods, techniques; classification of costs and cost sheet; Inventory valuation methods- LIFO, FIFO, HIFO and weighted average method, an elementary knowledge of activity based costing.

Unit – IV:
Management accounting – concept, need, importance and scope; budgetary control-meaning, need, objectives, essentials of budgeting, different types of budgets and their preparation.

Unit-V:
Standard costing and variance analysis (materials, labour)-Marginal costing and its application in managerial decision making, Break Even Analysis.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit. References:

1. MAHESWARI AND MAHESWARI" Financial Accounting", Vikas Publishing House, New Delhi, 2013.
2. Pandey, I.M. Management Accounting, Vikas Publishing House, New Delhi.
3. Horngen, Sundem & Stratton, Introduction to Management Accounting, Pearson Education, New Delhi.
4. Hansen & Mowen, Cost Management, Thomson Learning.
5. Mittal, S.N. Management Accounting and Financial management, Shree Mahavir Book Depot, New Delhi.
6. Jain S.P. and Narang K.L. Advanced Cost Accounting, Kalyani Publishers Ludhiana.
7. Khan M.Y. and Jain, P.K. Management Accounting, TMH, N. Delhi.

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	Quantitative Analysis for Business Decisions	**100**	**4**	**0**	**0**	**4**

Objective:

Students would be able to acquire an understanding of descriptive statistical tools like measures of central tendency & measures of variation and apply these tools to real life situations.

Unit I

Basic Mathematical & Statistical Techniques: Linear, Quadratic, Logarithmic and Exponential Functions- Permutations and Combinations – Matrices - Elementary operations of matrices.

Unit II

Measures of Central Tendency – Measures of Dispersion –Simple Correlation and Regression Analysis Concept of Probability- Probability Rules – Joint and Marginal Probability – Baye‘s Theorem- Probability Distributions- Binomial, Poisson, Normal and Exponential Probability Distributions.

UNIT III

Introduction to Decision Theory: Steps involved in Decision Making, different environments in which decisions are made, Criteria for Decision Making, Decision making under uncertainty, Decision making under conditions of Risk-Utility as a decision criterion, Decision trees, Graphic displays of the decision making process, Decision making with an active opponent.

Unit-IV

Sampling and Sampling Distributions – Estimation – Point and Interval Estimates of Averages and proportions of small and Large Samples –Concepts of Testing Hypothesis –One Sample Test for Testing Mean and Proportion of Large and Small Samples.

Unit-V

Tests Two Samples –Tests of Difference between Mean and Proportions of Small and Large Samples – Chi- square Test of Independence and Goodness of Fitness- Analysis of Variance.

Relevant cases have to be discussed in each unit and in examination case is compulsory

from any unit. References:

1. N.D.Vohra: ―Quantitative Techniques in Management‖, Tata-McGraw Hill Private Limited, New Delhi, 2011.
2. Gupta S.P: ―Statistical Methods‖, S. Chand and Sons, New Delhi.
3. Anand Sharma: ―Quantitative Techniques for Business decision Making‖, Himalaya Publishers, New Delhi, 2012.
4. D P Apte: ―Operation Research and Quantitative Techniques‖, Excel Publication, New Delhi, 2013.

5. Hamdy, A.Taha: ―Operations Research: An Introduction‖, Prentice-Hall of India, New Delhi 2003.
6. Anderson: –Quantitative Methods for Business‖, Cengage Learning, New Delhi 2013.
7. Sancheti, Dc & VK Kapoor, –Business Mathematics‖, S Chand and Sons, New Delhi.

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	Legal and Business Environment	**100**	**4**	**0**	**0**	**4**

Objective:

To acquaint students with the issues of Indian business environment in which business has to operate, to relate the impact of environment on business in an integrated manner, and to give an exposure to important commercial and industrial laws.

UNIT-I

Introduction: Concept of Business Environment-Definition-Characteristics-Environmental factors, Importance at national and international level – problems and challenges – Environmental Scanning: Importance, Process of scanning- NITI Aayog: It‘s Role in Economic Development of India- Technological Environment: Features, Its impact on Business, Restraints on Technological Growth.

UNIT-II

Economic and Political Environment: Concept-Definition of Economic Environment-Economic Systems- Relative merits and demerits of each systems-Economic Policies-Monetary-Fiscal- Industrial policies since independence and their significance – regulatory and promotional framework . Structure of Indian Economy-Nature and significance. Economic Planning- Objectives, Merits, Limitations-Concept and Meaning of Political Environment.

UNIT-III

Legal Environment: - Business Law: Meaning, scope and need for Business Law-Source of Business Law- Indian Contract Act 1872: Its Essentials, Breach of Contract and remedies. Intellectual Property Rights. Negotiable Instruments Act 1881.

UNIT-IV

Company Act 2013: Memorandum and Articles of Association-Partnership Act 1932: Duties of Partners- Dissolution of Partnership-Information Technology Act 2000: Digital signature-Cyber Frauds.

UNIT-V

Miscellaneous Acts: Sales of Goods Act 1930-Sale- agreement to Sale – Implied Conditions and Warranties- Consumer Protection Act 1986- Competition Act-Environment (Protection) Act 1986- Foreign Exchange Management Act (FEMA).

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Francis Cherunillam, Business Environment, Himalaya Publishers.
2.K.Aswathappa, Essentials of Business Environment, Himalaya Publishers.
3.P.K.Dhar, Indian Economy Growing Dimensions, Kalyani Publishers 4.
4.N.D.Kapoor , Mercantile Law, Sultan Chand Publishers.
5.Chaula and Garg, Mercantile Law, Kalyani Publishers

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	Business Communication and Soft skills	**100**	**4**	**0**	**0**	**4**

Objective:

To acquaint the students with fundamentals of communication, help them honing oral, written and non-verbal communication skills and to transform them as effective communicators.

Unit – I

Purpose and process of communication: Objectives of Communication-Process of Communication- Types of communication; noise, listening skills, Types of listening, essentials of good listening and tips.

LAB: LISTENING AND SPEAKING SKILLS- Conversational skills (formal and informal) – group discussion. Listening to lectures, discussions, talk shows, news programmes, dialogues from TV/radio/Ted talk/Podcast – watching videos on interesting events on YouTube.(Presenting before the class).

Unit – II

Managing Organizational Communication: Formal and Informal Communication- Interpersonal and Intrapersonal communication- Role of Emotion in Interpersonal Communication- Barriers to Interpersonal Communication- Exchange Theory-Gateways for Effective Interpersonal Communication.

LAB: Organizational Communication:

Choosing the organization – goal setting - time management — leadership traits – team work – communicating across teams- designing career and life planning.

Unit – III

Non verbal communication and Body Language: Kinesics, Proxemics, Paralanguage, Haptics, handshakes, appropriate body language and mannerisms for interviews: business etiquettes- across different cultures.

LAB: Understanding Body Language Aspects and presenting oneself to an interviewer, Proper handshakes**.**

Unit – IV

Written communication: mechanics of writing, report writing- business correspondence-business letter format- Meetings and managing meetings- Resume writing-Formats and Skills.

LAB: Writing job applications – cover letter – resume – emails – letters – memos – reports – blogs – writing for publications.

Unit- V

Presentation skills: prerequisites of effective presentation, format of presentation; Assertiveness –strategies of assertive behavior; Communication skills for group discussion and interviews, Interview Techniques.

LAB: Designing presentations and enhancing presentation skills.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Mallika Nawal: ‒Business Communication‖, Cengage Learning, New Delhi, 2012.
2. Edwin A. Gerloff, Jerry C. Wofford, Robert Cummins Organisational Communication:

The key stone to managerial effectiveness.
3. Meenakshi Rama: ‐*Business Communication*‖, Oxford University Press, NewDelhi
4. C.S.G. Krishnamacharyulu and Dr. Lalitha Ramakrishnan, Business Communication, Himalaya Publishing House, Mumbai
5. Paul Turner: ‐*Organisational Communication*‖, JAICO Publishing House, New Delhi.
6. SathyaSwaroopDebasish, Bhagaban Das‖ ‐*Business Communication*‖, PHIPrivate Limited, New Delhi, 2009.
7. R.K.Madhukar: ‐Business Communication‖, Vikas Publishing House, New Delhi, 2012.
8. Kelly M Quintanilla, Shawn T.Wahl:‐Business and Professional Communication‖, SAGE,New Delhi, 2012.
9. Sangita Mehta, NeetyKaushish: ―Business Communication‖, University Science Press, New Delhi, 2010.
10. Anjali Ghanekar: ‐Business Communication Skills‖, Everest Publishing House, New Delhi,2011

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Open Elective	**Cross Cultural Management**	**100**	**4**	**0**	**0**	**4**

Objective:

The objective of this course is to enhance the ability of class members to interact effectively with people from cultures other than their own, specifically in the context of international business. The course is aimed at significantly improving the ability of practicing managers to be effective global managers.

Unit – I

Introduction – Concept of Culture for a Business Context; Brief wrap up of organizational culture & its dimensions; Cultural Background of business stakeholders [managers, employees, shareholders, suppliers, customers and others] – An Analytical framework.

Unit – II

Culture and Global Management – Global Business Scenario and Role of Culture. Framework for Analysis; Elements & Processes of Communication across Cultures; Communication Strategy for/ of an Indian MNC and Foreign MNC & High-Performance Winning Teams and Cultures; Culture Implications for Team Building.

Unit – III

Cross Culture – Negotiation & Decision Making – Process of Negotiation and Needed Skills & Knowledge Base – Overview with two illustrations from multicultural contexts [India – Europe/ India – US settings, for instance]; International and Global Business Operations- Strategy Formulation & Implementation; Aligning Strategy, Structure & Culture in an organizational Context.

Unit – IV

Global Human Resources Management – Staffing and Training for Global Operations – Expatriate – Developing a Global Management Cadre.. Motivating and Leading; Developing the values and behaviours necessary to build high-performance organization personnel [individuals and teams included] – Retention strategies.

Unit – V

Corporate Culture – The Nature of Organizational Cultures Diagnosing the As is Condition; Designing the Strategy for a Culture Change Building; Successful Implementation of Culture Change Phase; Measurement of ongoing Improvement.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Cashby Franklin, Revitalize your corporate culture: PHI, Delhi
2. Deresky Helen, International Management: Managing Across Borders and Cultures, PHI, Delhi
3. Esenn Drlarry, Rchildress John, The Secret of a Winning Culture: PHI, Delhi

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Open Elective	**Rural Innovation projects**	**100**	**3**	**0**	**0**	**3**

Objective:
To make the students understand various natural resources and their importance in rural development.

Unit-I
Definition and meaning of Resources, Types of Rural Resources, Natural and Man-made, Characteristics of Resources, Importance of different resources in Rural Development. Rural Governance and Administration in India- Pre & Post independence-Elements of Indian constitution Constitutional amendment to Panchayati Raj system-Development (Department) Administration in Rural India.

Unit-II
Land Resources development experience: Classification of land based on utility, Soils – Structure and importance, Properties of Soil- Physical and Chemical, Soil Conservation-methods and importance. Status of Rural Development in the SAARC countries.

Unit-III
Human Resources Dimensions of Rural Development-Quantitative aspects of rural human resource (Gender & Age wide classification, Density, Issue in rural human resources- Scarcity, lack of skill, attitude, and social status). Food security and public distribution system-Rural Financial Sector –Sources of Rural Credit: Institutional and Non Institutional - Service Delivery System in Rural areas, Rural Infrastructural Sector and Millennium Development Goals Housing in Rural Areas.

Unit-IV
Approaches of Rural Development in India- institutional, technological, area and target group, participatory, individualistic. Rural Development Policies during different plan periods. Strategies of Rural Development – growth oriented strategy, Welfare strategy, Responsive strategy, Holistic strategy, right-based strategy. PURA Model.

Unit-V
Review of Rural Development Programmes in the area of agricultural sector – crop, non-crop, livestock, fishery, forestry. Review of Rural Development Programmes in area of Social Sectors – Health, Sanitation and Education. Project Planning and Management.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Rural Development: Principles, Policies and Management, Katar Singh, Sage Publications India Pvt. Ltd., 2009.
2. Soil & Water Conservation & Watershed Management Hardcover – 2012, Singh PK Mahnot

Open Elective	**MOOCs : SWAYAM/NPTEL- Related to Management Courses other than listed courses in the syllabus**	**100**	**4**	**0**	**0**	**4**

NOTE: Students opting for SWAYAM should register for 12 weeks course and need to produce the Pass certificate with minimum 40% (Percentage) for receiving the Academic Credits. The actual percentage mentioned on the certificate will be transferred to the marks memo.

	Business Communication and Soft skills Lab	**50**	**0**	**0**	**2**	**1**

(LAB):

Evaluation Process:

i) For practical (LAB) subject the distribution shall be **20 marks** for internal evaluation and **30 marks** for the semester end examinations. There shall be continuous evaluation by the internal subject teacher during the semester for **20** internal marks. Out of the **20 marks internal, 10** marks shall be for day-to-day performance (**5 marks for day-to-day evaluation and 5 marks for Record**) and **10 marks** shall be evaluated by conducting an internal test towards the end of semester.

ii) Semester End examination shall be conducted by the teacher concerned and external examiner for **30 marks. Three QUESTIONS will be given in the external examination from the activities listed in each unit. Each question carries 10 marks. Duration of the examination is 90 minutes.**

Unit: 1

Listening and speaking skills- Conversational skills (formal and informal) – group discussion. Listening to lectures, discussions, talk shows, news programmes, dialogues from TV/radio/Ted talk/Podcast – watching videos on interesting events on YouTube. (Presenting before the class).

Activities for Unit-1:

1) Dos and Don'ts of Group Discussions.
2) Tell me about yourself.
3) Self SWOT Analysis
4) Analysis of Academic Video clip uploaded on the system for the student.
5) News Presentation- Current affairs.

Unit – II

Organizational Communication:

Choosing the organization – goal setting - Time management — leadership traits – Team work – communicating across teams- designing career and life planning.

Activities for Unit-II:

1) Individual goal setting – process / SMART goals.
2) Designing a team activity to be conducted in the class.
3) Preparing a schedule plan for conducting an event (with proper time management).
4) Designing a self career plan.
5) Prepare a time management chart for your daily schedule. (Prioritization)

Unit – III

Non verbal communication and Body Language:

Understanding Body Language Aspects and presenting oneself to an interviewer, Proper handshakes**.**

Activities for Unit-III:

1) Maintaining the body language for interviews.
2) Presenting oneself to an interviewer.
3) Importance of kinesics in an interview.
4) Role plays on cross cultural communication.

Unit – IV

Written communication:

Writing job applications – cover letter – resume – emails – letters – memos – reports – blogs – writing for publications.

Activities for Unit-IV:

1) Preparation of effective Resume.
2) Write dialogues for the following situation: Mr. A calls a Hotel in Shimla to make a reservation for four people.
3) Write dialogues for the following situation: Mr.K gives direction to his friend how to reach the JNTUK University.
4) Write a covering letter for job application in TCS.
5) Write at least 5 E-mail etiquette.

Unit- V

Presentation skills:

Designing presentations and enhancing presentation skills.

Activities for Unit-V:

1) Prepare a PowerPoint presentation on presentation skills.
2) How to make an effective presentation.
3) Prepare and present a PPT on any topic given by the examiner.

References:

1.Mallika Nawal: ‒Business Communication‖, Cengage Learning, New Delhi, 2012.
2.Edwin A. Gerloff, Jerry C. Wofford, Robert Cummins Organisational Communication: The key stone to managerial effectiveness.
3.Meenakshi Rama: ‒*Business Communication*‖, Oxford University Press, NewDelhi
4. C.S.G. Krishnamacharyulu and Dr. Lalitha Ramakrishnan, Business Communication, Himalaya Publishing House, Mumbai
5. Paul Turner: ‒*Organisational Communication*‖, JAICO Publishing House, New Delhi.
6. SathyaSwaroopDebasish, Bhagaban Das‖ ‒*Business Communication*‖, PHIPrivate Limited, New Delhi, 2009.
7. R.K.Madhukar: ‒Business Communication‖, Vikas Publishing House, New Delhi, 2012.
8. Kelly M Quintanilla, Shawn T.Wahl:‒Business and Professional Communication‖, SAGE,New Delhi, 2012.
9. Sangita Mehta, NeetyKaushish: ‒Business Communication‖, University Science Press, New Delhi, 2010.
10. Anjali Ghanekar: ‒Business Communication Skills‖, Everest Publishing House, New Delhi,2011

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	Information Technology – Lab1 (Spreadsheet and Tally)	**50**	**0**	**0**	**2**	**1**

Lab Evaluation:

i) For practical (LAB) subject the distribution shall be **20 marks** for internal evaluation and **30 marks** for the semester end examinations. There shall be continuous evaluation by the internal subject teacher during the semester for **20** internal marks. Out of the **20 marks internal, 10** marks shall be for day-to-day performance (**5 marks for day-to-day evaluation and 5 marks for Record**) and **10 marks** shall be evaluated by conducting an internal test towards the end of semester.

ii) Semester End examination shall be conducted by the teacher concerned and external examiner for **30 marks. Three QUESTIONS will be given in the external examination from the experiments based on the syllabus. Each question carries 10 marks. Duration of the examination is 90 minutes.**

UNIT- 1

Introducing spreadsheet: Choosing the correct tool; Creating and Saving; Spreadsheet workspace; Managing the workspace; Entering and editing data; Data entry; Selecting cells; Saving time when entering data. Presenting a spreadsheet; Number and date/time format tools; Percentages; Dates and Times; Currency; Text; Performing calculations; Basic arithmetic; Using functions; Replicating formulae; Absolute cell addressing; References between worksheets.

UNIT -II

Ranges and functions: Creating named ranges; Using named ranges; Finding and inserting functions; Excel – Functions: what if, Conditional count, sum and average, Multiple criteria with count, sum and if. Time and date calculations.

UNIT- III

Basic of Accounting: Type of Accounts, Rules of Accounting, Principles of concepts and conventions, double entry system, book keeping Mode of Accounting, Financial Statements, Transaction, Recording Transactions. Getting the functional with Tally, Creation and setting up of company in Tally.

UNIT- IV

Accounting Masters in Tally- Features- Configurations- Setting up Account Heads.

UNIT- V

Inventory in Tally- Stock – groups – Stock Categories - Godowns / Location Units of Measure - Stock Items - Creating Inventor y Masters for National Traders

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II SEMESTER

	Financial Management	**100**	**4**	**0**	**0**	**4**

Objective:
The Course is designed for the students to understand the Financial Management concepts and to identify, enrich and fulfill the needs of Financial Markets.

UNIT- I
Financial Management: Concept - Nature and Scope - Evolution of financial Management - The new role in the contemporary scenario – Goals and objectives of financial Management - Firm's mission and objectives - Profit maximization Vs. Wealth maximization – Maximization Vs Satisfying - Major decisions of financial manager.

UNIT-II
Financing Decision: Sources of finance - Concept and financial effects of leverage – EBIT – EPS analysis. Cost of Capital: Weighted Average Cost of Capital– Theories of Capital Structure.

UNIT -III
Investment Decision: Concept and Techniques of Time Value of Money – Nature and Significance of Investment Decision – Estimation of Cash flows – Capital Budgeting Process – Techniques of Investment Appraisal – Discounting and Non Discounting Methods.

UNIT-IV
Dividend Decision: Meaning and Significance – Major forms of dividends – Theories of Dividends – Determinants of Dividend – Dividends Policy and Dividend valuation – Bonus Shares –Stock Splits – Dividend policies of Indian Corporate.

UNIT-V
Liquidity Decision: Meaning - Classification and Significance of Working Capital – Components of Working Capital – Factors determining the Working Capital – Estimating Working Capital requirement – Cash Management Models – Accounts Receivables –Credit Policies – Inventory Management.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. I.M. Pandey: **–Financial Management",** Vikas Publishers, New Delhi, 2013.
2. Khan and Jain: Financial Management, Tata McGraw Hill, New Delhi,
3. Prasanna Chandra: **–Financial Management Theory and Practice‖**, Tata McGrawHill 2011.
4. P.Vijaya Kumar, M.Madana Mohan, G. Syamala Rao: **–Financial Management",** Himalaya Publishing House, New Delhi, 2013.
5. Brigham,E.F: **–Financial Management Theory and Practice‖**, Cengae Learning, New Delhi, 2013
6. RM Srivastava, Financial Management, Himalaya Publishing house, 4th edition.

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	Human Resource Management	**100**	**4**	**0**	**0**	**4**

Objective:

To equip the students with basic concepts of Human Resource Management and the various functions of HRM including Industrial Relations in the liberalized, socialism environment.

UNIT -I

HRM: Significance - Definition and Functions – evolution of HRM- Principles - Ethical Aspects of HRM- - HR policies, Strategies to increase firm performance - Role and position of HR department –aligning HR strategy with organizational strategy - HRM – changing , global perspective challenges, environment – cross- cultural problems – emerging trends in HRM.

UNIT -II

Investment perspectives of HRM: HR Planning – Demand and Supply forecasting - Recruitment and Selection- Sources of recruitment - Tests and Interview Techniques - Training and Development – Methods and techniques– Job design , evaluation and Analysis - Management development - HRD concepts.

UNIT -III

Performance Appraisal: Importance – Methods – Traditional and Modern methods – Latest trends in performance appraisal - Career Development and Counseling- Compensation - Concepts and Principles- Influencing Factors- Current Trends in Compensation- Methods of Payments in detail - Incentives rewards compensation mechanisms.

UNIT -IV

Wage and Salary Administration: Concept- Wage Structure- Wage and Salary Policies- Legal Frame Work- Determinants of Payment of Wages- Wage Differentials - Incentive Payment Systems. Welfare management: Nature and concepts – statutory and non-statutory welfare measures.

UNIT -V

Managing Industrial Relations: Trade Unions - Employee Participation Schemes- Collective Bargaining– Grievances and disputes resolution mechanisms – Safety at work – nature and importance – work hazards – safety mechanisms - Managing work place stress.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit. References:

1. K Aswathappa: ―Human Resource and Personnel Management‖, Tata McGraw Hill, New Delhi, 2013.
2. N.Sambasiva Rao and Dr. Nirmal Kumar: ―Human Resource Management and Industrial Relations‖, Himalaya Publishing House, Mumbai.
3. Mathis, Jackson,Tripathy:―Human Resource Management:Asouth-Asin Perspective‖, Cengage Learning, New Delhi, 2013.
4. Subba Rao P: ―Personnel and Human Resource Management-Text and Cases‖, Himalaya Publications, Mumbai, 2013.
5. MadhurimaLall, Sakina QasimZasidi: ―Human Resource Management‖, Excel Books, New Delhi, 2010.

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	Marketing Management	**100**	**4**	**0**	**0**	**4**

The Course is designed for the students to understand the Marketing concepts and to identify, enrich and fulfill the needs of customers and markets.

UNIT -I

Introduction to Marketing: Needs - Wants – Demands - Products - Exchange - Transactions - Concept of Market and Marketing and Marketing Mix - Production Concept- Product Concept - Sales and Marketing Concept - Societal Marketing Concept - Green Marketing concept - Indian Marketing Environment.

UNIT -II

Market Segmentation, Targeting and Positioning: Identification of Market Segments - Consumer and Institutional/corporate Clientele - Segmenting Consumer Markets - Segmentation Basis – Evaluation and Selection of Target Markets – Positioning significance - Developing and Communicating a Positioning Strategy.

UNIT -III

Product and Pricing Aspects: Product – Product Mix - Product Life cycle - Obsolescence- Pricing- Objectives of Pricing - Methods of Pricing - Selecting the Final price - Adopting price - Initiating the price cuts - Imitating price increases-Responding to Competitor‘s price changes.

UNIT -IV

Marketing Communication: Communication Process – Communication Mix – Integrated Marketing Communication - Managing Advertising Sales Promotion - Public relations and Direct Marketing - Sales force
– Determining the Sales Force Size - Sales force Compensation.

UNIT -V

Distribution, Marketing Organization and Control: Channels of Distribution- Intensive, Selective and Exclusive Distribution- Organizing the Marketing Department - Marketing Implementation - Control of Marketing Performance - Annual Plan Control - Profitability Control - Efficiency Control - Strategic Control.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References

1. Phillip Kotler: **–Marketing Management –**, Pearson Publishers, New Delhi, 2013.
2. Rajan Saxena: **–Marketing Management‖**, Tata McGraw Hill, New Delhi, 2012.
3. V S Ramaswamy & S Namakumari, Marketing Management Global Perspective Indian Context 4th Edition, Mac Millan Publishers 2009.
4. Tapan K Panda: **“Marketing Management‖**, Excel Books, New Delhi, 201**2**
5. Paul Baines, Chris Fill, Kelly Page Adapted by Sinha K: **–Marketing‖**, Oxford University Press, Chennai, 2013

	Operations Management	**100**	**4**	**0**	**0**	**4**

Objective:

This Course is designed to make student understand the strategic significance of Operation management, to acquaint them with application of discipline to deal with real life business problem.

UNIT-I:

Introduction to Operation Management: Nature & Scope of Operation/ Production Management, Relationship with other functional areas, Recent trend in Operation Management, Manufacturing & Theory of Constraint, Types of Production System, Just in Time (JIT) & lean system.

UNIT -II:

Product Design & Process Selection: Stages in Product Design process, Value Analysis, Facility location & Layout: Types, Characteristics, Advantages and Disadvantages, Work measurement, Job design.

UNIT- III:

Forecasting & Capacity Planning: Methods of Forecasting, Overview of Operation Planning, Aggregate Production Planning, Production strategies, Capacity Requirement Planning, MRP, Scheduling, Supply Chain Management, Purchase Management, Inventory Management.

Unit- IV:

Productivity: Factors, Affecting Productivity – Job Design – Process Flow Charts – Methods Study – Work Measurement – Engineering and Behavioral Approaches.

UNIT -V:

Quality Management: Quality- Definition, Dimension, Cost of Quality, Quality Circles-Continuous improvement (Kaizen), ISO (9000&14000 Series), Statistical Quality Control: Variable & Attribute, Process Control, Control Charts -Acceptance Sampling Operating Characteristic Curve (AQL , LTPD, Alpha & Beta risk), Total Quality Management (TQM).

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit. References:

1. Krajewski & Ritzman (2004). Operation Management -Strategy and Analysis. Prentice Hall of India.
2. Panner Selvem, Production and Operation Management, Prentice Hall of India.
3. Chunnawals, Production & Operation Management Himalaya, Mumbai
4. Charry, S.N (2005). Production and Operation Management- Concepts, Methods

Strategy. John Willy& Sons Asia Pvt Limited.

5. K Aswathappa & Sridhar Bhatt, Production & Operations Management, Himalaya, Mumbai.

	Business Research Methods	**100**	**4**	**0**	**0**	**4**

Developing the students in Research orientation and to acquaint them with fundamental of research methods.

UNIT -I

Introduction : Nature and Importance of Research, The role of Business Research, Aims of social research, Types of Research- Pure research vs. Applied research, Qualitative research vs. Quantitative research, Exploratory research, Descriptive research and Experimental research, ethical issues in business research- Defining Research Problem, Steps in Research process.

UNIT -II

Data Base: Discussion on primary data and secondary data, tools and techniques of collecting data. Methods of collecting data. Sampling design and sampling procedures. Random vs. Non-random sampling techniques, determination of sample size and an appropriate sampling design. Designing of Questionnaire –Measurement and Scaling – Nominal Scale – Ordinal Scale – Interval Scale – Ratio Scale – Guttmann Scale – Likert Scale – Schematic Differential Scale.

UNIT -III

Survey Research and data analysis: Selection of an appropriate survey research design, the nature of field work and Field work management. Media used to communicate with Respondents, Personal Interviews, Telephone interviews, Self-administered Questionnaires- Editing – Coding – Classification of Data – Tables and Graphic Presentation –Preparation and Presentation of Research Report.

UNIT -IV

Statistical Inference: Formulation of Hypothesis –Tests of Hypothesis - Introduction to Null hypothesis vs. alternative hypothesis, parametric vs. non-parametric tests, procedure for testing of hypothesis, tests of significance for small samples, application, t-test, Chi Square test.

UNIT -V

Multivariate Analysis: Nature of multivariate analysis, classifying multivariate techniques, analysis of dependence, analysis of interdependence. Bi-Variate analysis-tests of differences-t test for comparing two means and z-test for comparing two proportions and ANOVA for complex experimental designs.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References

1. C.R. Kothari: Research Methodology, methods and Techniques New Age InternationalPublisher.
2. Navdeep and Guptha : –**Statistical Techniques & Research Methodology**‖, Kalyani Publishers
3. Willam G.Zikmund, Adhkari: –***Business Research Methods***‖,
4. Learning, New Delhi, 2013.
5. A.N. Sadhu, Amarjit singh, Research methodology in social sciences, 7th Edition Himalaya Publications.
6. A Bhujanga rao , Research methodology, Excel Books, 2008.

	Project Management	**100**	**4**	**0**	**0**	**4**

The objective of this course is to enable the students to gain basic knowledge about the concept of project, project management, project life-cycle, project appraisal; to acquaint the students about various issues of project management.

Unit -I:

Basics of Project Management –Concept– Project environment – Types of Projects – Project life cycle – Project proposals – Monitoring project progress – Project appraisal and Project selection – Causes of delay in Project commissioning– Remedies to avoid overruns. Identification of Investment opportunities – Sources of new project ideas, preliminary screening of projects – Components for project feasibility studies.

Unit- II:

Market feasibility -Market survey – Categories of Market survey – steps involved in conducting market survey

– Demand forecasting techniques, sales projections.

Unit- III:

Technical and Legal feasibility: Production technology, materials and inputs, plant capacity, site selection, plant layout, Managerial Feasibility Project organization and responsibilities. Legalities – Basic legal provisions. Development of Programme Evaluation & Review Technique (PERT) –Construction of PERT (Project duration and valuation, slack and critical activities, critical path interpretation) – Critical Path Method (CPM)

Unit- IV:

Financial feasibility – Capital Expenditure – Criteria and Investment strategies – Capital Investment Appraisal Techniques (Non DCF and DCF) – Risk analysis – Cost and financial feasibility – Cost of project and means of financing — Estimation of cash flows – Estimation of Capital costs and operating costs; Revenue estimation – Income – Determinants – Forecasting income –Operational feasibility - Breakeven point – Economics of working.

Unit -V:

Project Implementation and Review: Forms of project organization – project planning – project control – human aspects of project management – prerequisites for successful project implementation – project review – performance evaluation – abandonment analysis.

Relevant cases have to be discussed in each unit and in examination case is

compulsory from any unit. References:

1. Prasanna Chandra, ―Projects, Planning, Analysis, Selection, Financing, Implementation and Review‖, Tata McGraw Hill Company Pvt. Ltd., New Delhi 1998.
2. Gido: Effective Project Management, 2e, Thomson, 2007.
3. Singh M.K, ―Project Evaluation and Management‖.
4. Vasanth Desai, Project Management, 4th edition, Himalaya Publications 2018.
5. Clifford F. Gray, Erik W. Larson, ―Project Management, the Managerial Emphasis‖, McGraw Hill, 2000.

	Technology Management	**100**	**4**	**0**	**0**	**4**

The course aims at providing an overview of various issues connected with Management of Technology in organizations.

UNIT-I.

Evolution of Technology-Effects of New Technology- Technology Innovation-Invention-Innovation- Diffusion- Revolutionary and Evolutionary Innovation- Product and Process Innovation- Strategic Implications of Technology- Technology - Strategy Alliance- -Convergent and Divergent Cycle- The Balanced Approach.

UNIT-II:

Technology Assessment- Technology Choice- Technological Leadership and Followership- Technology Acquisition- Technological Forecasting- Exploratory, Intuitive, Extrapolation, Growth Curves, Technology Monitoring- Normative: Relevance Tree, Morphological Analysis, Mission Flow Diagram.

UNIT-III:

Diffusion of Technology- Rate of Diffusion; Innovation Time and Innovation Cost-Speed of Diffusion- Technology Indicators- Various Indicators- Organizational Implications of Technology- Relationship between Technical Structure and Organizational Infrastructure- Flexible Manufacturing Management System (FMMS).

UNIT-IV:

Financial Aspects in Technology Management- Improving Traditional Cost - Management System- Barriers to the Evaluation of New Technology- Social Issues in Technology Management- Technological Change and Industrial Relations- Technology Assessment and Environmental Impact Analysis.

UNIT-V:

Human Aspects in Technology Management- Integration of People and Technology-Organizational and Psychological Factors- Organizational Outcome- Technology Transfer-Technology Management Scenario in India.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

Suggested Readings:

1. Sharif Nawaz: Management of Technology Transfer & Development, APCFT, Bangalore, 1983.
2. Rohtagi P K, Rohtagi K and Bowonder B: Technological Forecasting, Tata McGraw Hill, New Delhi.

3. Betz Fredrick: Managing Technology, Prentice Hall, New Jersey.
4. Gaynor: Handbook of Technology Management, McGraw Hill.
5. Tarek Khalil: Management of Technology, McGraw Hill International, 2000.

	Lean Management	**100**	**4**	**0**	**0**	**4**

To understand issues and challenges in implementing and development in lean manufacturing techniques from TPS and its contribution for improving organizational performance.

Unit- I

Introduction: Mass production system, Craft Production, Origin of Lean production system , Why Lean production , Lean revolution in Toyota , Systems and systems thinking , Basic image of lean production , Customer focus , Waste Management.

UNIT- II

Just In Time: Why JIT , Basic Principles of JIT, JIT system, Kanban, Six Kanban rules, Expanded role of conveyance, Production leveling, Three types of Pull systems, Value stream mapping. JIDOKA, Development of Jidoka concept, Why Jidoka, Poka, Yoke systems, Inspection systems and zone control – Types and use of Poka-Yoke systems, Implementation of Jidoka

UNIT -III

Kaizen: Six – Sigma philosophy and Methodologies ,QFD, FMEA Robust Design concepts; SPC, QC circles standardized work in lean system , Standards in the lean system, 5S system.

UNIT- IV

Total Productive Maintenance: Why Standardized work, Elements of standardized work, Charts to define standardized work, Kaizen and Standardized work Common layouts.

UNIT- V

Hoshin Planning & Lean Culture: Involvement, Activities supporting involvement, Quality circle activity, Kaizen training, Key factors of PKT success, Hoshin Planning System, Four Phases of Hoshin Planning, Why Lean culture – How lean culture feels.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Jeffrey Liker, The Toyota Way: Fourteen Management Principles from the World's Greatest Manufacturer, McGraw Hill, 2004.
2. Debashish Sarkar , Lessons in Lean Management,
3. Dale H., Besterfield , Carol, Besterfield, etal, Total Quality Management (TQM) 5e by Pearson 2018.

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	Data Base Management System	**100**	**4**	**0**	**0**	**4**

The course is to present an introduction to database management systems, with an emphasis on how to organize, maintain and retrieve - efficiently, and effectively - information from a DBMS.

UNIT- I

Introduction to Database Systems: Data - Database Applications - Evolution of Database - Need for Database Management – Data models - Database Architecture - Key Issues and Challenges in Database Systems.

UNIT -II

ER and Relational Models: ER Models – ER to Relational Mapping –Object Relational Mapping - Relational Model Constraints - Keys - Dependencies - Relational Algebra - Normalization - First, Second, Third & Fourth Normal Forms - BCNF – Join Dependencies.

UNIT- III

Data Definition and Querying: Basic DDL - Introduction to SQL - Data Constraints - Advanced SQL - Views

- Triggers - Database Security – Embedded & Dynamic SQL.

UNIT -IV

Transactions and Concurrency: Introduction to Transactions - Transaction Systems - ACID Properties - System & Media Recovery - Need for Concurrency - Locking Protocols – SQL for Concurrency – Log Based Recovery - Two Phase Commit Protocol - Recovery with SQL- Deadlocks & Managing Deadlocks.

UNIT -V

Advanced Topics in Databases: Indexing & Hashing Techniques - Query Processing & Optimization - Sorting & Joins – Database Tuning - Introduction to Special Topics - Spatial & Temporal Databases – Data Mining and Warehousing.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Abraham Silberschatz, Henry F. Korth, S. Sudharshan, ―Database System Concepts‖, SixthEdition, Tata McGraw Hill, 2010.
2. Ramez Elmasri, Shamkant B. Navathe, ―Fundamentals of Database Systems‖, Sixth Edition, Pearson/Addison - Wesley, 2010.
3. C.J. Date, A. Kannan and S. Swamynathan, ―An Introduction to Database

Systems‖, PearsonEducation, Eighth Edition, 2006.

4. Raghu Ramakrishnan, ―Database Management Systems‖, Fourth Edition, McGraw Hill, 2015.

	IT Lab 2 (Programming R)	**50**	**0**	**0**	**2**	**1**

After taking the course, students will be able to

- Use R for statistical programming, computation, graphics, and modeling,
- Write functions and use R in an efficient way,
- Fit some basic types of statistical models
- Use R in their own research,
- Be able to expand their knowledge of R on their own.

SYLLABUS:

UNIT-I:
Introduction, How to run R, R Sessions and Functions, Basic Math, Variables, Data Types, Vectors, Conclusion, Advanced Data Structures, Data Frames, Lists, Matrices, Arrays, Classes**.**

UNIT-II:
R Programming Structures, Control Statements, Loops, - Looping Over Non vector Sets,- If-Else, Arithmetic and Boolean Operators and values, Default Values for Argument, Return Values, Deciding Whether to explicitly call return- Returning Complex Objects, Functions are Objective, No Pointers in R, Recursion, A Quicksort Implementation-Extended Extended Example: A Binary Search Tree.

UNIT-III:
Doing Math and Simulation in R, Math Function, Extended Example Calculating Probability- Cumulative Sums and Products-Minima and Maxima- Calculus, Functions Fir Statistical Distribution, Sorting, Linear Algebra Operation on Vectors and Matrices, Extended Example: Vector cross Product- Extended Example: Finding Stationary Distribution of Markov Chains, Set Operation, Input /out put, Accessing the Keyboard and Monitor, Reading and writer Files,

UNIT-IV:
Graphics, Creating Graphs, The Workhorse of R Base Graphics, the plot() Function – Customizing Graphs, Saving Graphs to Files-

UNIT-V:
Probability Distributions, Normal Distribution- Binomial Distribution- Poisson Distributions Other Distribution, Basic Statistics, Correlation and Covariance, T-Tests,- ANOVA.

References:

1) The Art of R Programming, Norman Matloff, Cengage Learning
2) R for Everyone, Lander, Pearson
3) R Cookbook, PaulTeetor, Oreilly
4) R in Action,Rob Kabacoff, Manning.
5) Garrett Grolemund, Hands on Programming with R, Oreilly

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III SEMESTER CORE PAPERS

STRATEGIC MANAGEMENT

	STRATEGIC MANAGEMENT	**100**	**4**	**0**	**0**	**4**

UNIT-I
Introduction: Concepts in Strategic Management, Strategic Management as a process – Developing a strategic vision, Mission, Objectives, Policies – Factors that shape a company's strategy – Crafting a strategy.

UNIT-II
Environmental Scanning: Industry and Competitive Analysis -Evaluating company resources and competitive capabilities – SWOT Analysis – Strategies and competitive advantages in diversified companies and its evaluation. Tools and techniques- Porter's Five Force Model, BCG Matrix, GE Model,

UNIT-III
Strategy Formulation : Strategy Framework For Analyzing Competition, Porter's Value Chain Analysis, Competitive Advantage of a Firm, Exit and Entry Barriers - Formulation of strategy at corporate, business and functional levels. Types of Strategies

UNIT-IV
Strategy Implementation : Strategy and Structure, Strategy and Leadership, Strategy and culture connection - Operationalising and institutionalizing strategy- Organizational Values and Their Impact on Strategy – Resource Allocation – Planning systems for implementation.

UNIT-V
Strategy Evaluation and control – Establishing strategic controls - Measuring performance – appropriate measures- Role of the strategist – using qualitative and quantitative benchmarking to evaluate performance - strategic information systems – problems in measuring performance – Strategic surveillance -strategic audit

References

1. P.Subba Rao: Business Policy and Strategic Management, Himalaya Publishing House, New Delhi, 2010
2. Kazmi: Strategic Management and Business Policy, Tata McGraw Hill, 2009
3. R.Srinivasn: Strategic Management, PHI Learning, New Delhi, 2009
4. Adrian Haberberg & Alison: Strategic Management, Oxford University Press, New Delhi, 2009

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY - GURAJADA - VIZIANAGARAM

VIZIANAGARAM 535 003 Andhra Pradesh (India)

	OPERATIONS RESEARCH	**100**	**4**	**0**	**0**	**4**

Unit – I:

Importance-The History of OR-Definition-Features-Scope of Operations Research –Linear Programming: Introduction-Advantages of using LP-Application areas of LP- Formation of mathematical modelling, Graphical method, the Simplex Method; Justification, interpretation of Significance of All Elements In the Simplex Tableau, Artificial variable techniques: Big M method.

UNIT II:

Transportation, Assignment Models: Definition and application of the transportation model, methods for finding initial solution-tests for optimality-variations in transportation problem, the Assignment Model, Travelling Salesman Problem.

Unit – III:

Dynamic Programming – Applications of D.P. (Capital Budgeting, Production Planning, Solving Linear Programming Problem) – Integer Programming – Branch and Bound Method.

Unit – IV :– Game Theory: Introduction – Two Person Zero-Sum Games, Pure Strategies, Games with Saddle Point, Mixed strategies, Rules of Dominance, Solution Methods of Games without Saddle point – Algebraic, matrix and arithmetic methods. Simulation – Simulation Inventory and Waiting Lines.

Unit – V:

P.E.R.T. & C.P.M. and Replacement Model: Drawing networks – identifying critical path – probability of completing the project within given time- project crashing – optimum cost and optimum duration. Replacement models comprising single replacement and group replacement.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Winston, Operations Research, Cengage, ND
2. Anand Sharma, Operations Research, Himalaya Publishing House, 3. Kalavarthy, S. Operations Research, Vikas Publishers House Pvt Ltd.,
4. Mcleavey & Mojena, Principles of Operations Research for Management, AITBS publishers,
5. V.K.Kapoor, Operation Research Techniques for Management, Sultan Chand & Sons,
6. Richard Bronson & Govindasami Naadimuthu, SCHAUM'S OUTLINE OF THEORY & PROBLEMS OF Operations Research, 2nd Ed., Tata Mc Graw-Hill Edition,
7. JK Sharma Operation Research – Theory and Applications, MacMillan.

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IV SEMESTER CORE PAPERS

	PRINCIPLES OF EVENT MANAGEMENT	**100**	**4**	**0**	**0**	**4**

UNIT 1:

Introduction to event

Event- Meaning of event- Need for Event Management- Analysis of Event, Scope of Event, Decision Makers-Event Manager, Technical Staff- Establishing of Policies and Procedure- Developing Record Keeping Systems.

UNIT 2:

Event management procedure

Principles for holding an Event, General Details, Permissions- Policies, Government and Local Authorities, - Phonographic Performance License, Utilities- Fire brigade, Ambulance, Catering, Electricity, Water. Taxes Applicable.

UNIT 3:

Conduct of an event

Preparing a Planning Schedule, Organizing Tables, Assigning Responsibilities, Communication and Budget of Event- Checklist, Computer aided Event Management– Roles & Responsibilities of Event Managers for Different Events.

UNIT 4:

Public relations

Introductions to Public Relations- Concept- Nature- Importance- Limitations- Media- Types of Media- Media Management, Public Relation Strategy & Planning. Brain Storming for idea generation- Writings for Public Relations.

UNIT 5:

Corporate events

Planning of Corporate Event, Job Responsibility of Corporate Events Organizer, Arrangements, Budgeting, Safety of Guests and Participants, Creating Blue Print, Need for Entertainment in Corporate Events and Reporting.

SKILL DEVELOPMENT: Case Studies

- Preparation of Event Plan for Wedding,
- Preparing Budget for conduct of National level intercollegiate sports events.
- Preparation of Event Plan for College day Celebrations.
- Preparation of Budget for Conducting inter collegiate Commerce Fest.

BOOKS FOR REFERENCE:

1. Event Entertainment and Production – Author: Mark Sonderm CSEP Publisher: Wiley&

Sons, Inc.
2. GhouseBasha – Advertising & Media Mgt, VBH.
3. Anne Stephen – Event Management, HPH.
4. K. Venkataramana, Event Management, SHBP.
5. Special Event Production – Doug Matthews – ISBN 978-0-7506-8523-8
6. The Complete Guide to successful Event Planning – Shannon Kilkenny
7. Human Resource Management for Events – Lynn Van der Wagen (Author)
8. Successful Team Manageemnt (Paperback) – Nick Hayed (Author)
9. Event Management & Public Relations by Savita Mohan – Enkay Publishing House
10. Event Management & Public Relations By Swarup K. Goyal – Adhyayan Publisher –2009

	INNOVATION AND ENTREPRENEURSHIP	**100**	**4**	**0**	**0**	**4**

UNIT I
Entrepreneurship: Definition of Entrepreneur, Entrepreneurial motivation and barriers; Internal and external factors; Types of entrepreneurs; Theories of entrepreneurship; Classification of entrepreneurship. Creativity and Innovation: Creative Problems Solving, Creative Thinking, Lateral Thinking, Views of De Bono, Khandwalaand others, Creative Performance in terms of motivation and skills.

UNIT II
Creativity and Entrepreneurial Plan: Idea Generation, Screening and Project Identification, Creative Performance, Feasibility Analysis: Economic, Marketing, Financial and Technical; Project Planning, Evaluation, Monitoring and Control, segmentation, Targeting and positioning of Product, Role of SIDBI in Project Management.

UNIT III
Operation problems: Incubation and Take-off, Problems encountered Structural, Financial and Managerial Problems, Types of Uncertainty. Institutional support for new ventures: Supporting organizations; Incentives and facilities; Financial Institutions and Small-scale Industries, Govt. Policies for SSIs.

UNIT IV
Family and non-family entrepreneurs: Role of Professionals, Professionalism vs. family entrepreneurs, Role of Woman entrepreneur, Sick industries, Reasons for Sickness, Remedies for Sickness, Role of BIFR in revival, Bank Syndications.

Unit V
Introduction to Innovation management, Managing Innovation within Firms, Business strategy & organization Knowledge, New Product Strategy & Managing New Product Development, Role of Technology in Management of innovation, Managing for Intellectual Property Right. Start-Ups - Product Identification - Business Plan- The Marketing Plan and Financial Plan/ Sources of Capital - Business Setup - Legal and Administrative Task - Marketing and Branding of the Product.

References:
1) Couger, C-Creativity and Innovation (IPP, 1999)
2) Nina Jacob, -Creativity in Organisations (Wheeler, 1998)
3) Jonne&Ceserani-Innovation & Creativity(Crest) 2001.
4) BridgeSetal-Understanding Enterprise: Entrepreneurship and Small Business (Palgrave,2003)
5) Holt-Entrepreneurship: New Venture Creation (Prentice-Hall) 1998.
6) Singh P&Bhanderkar A-Winning the Corporate Olympiad:TheRenaissan cearadigm(Vikas)
7) Dollinger M J-Entrepreneurship (Prentice-Hall, 1999).
8) Tushman, M.L. & Lawrence, P.R. (1997)-Managing Strategic Innovation & Change Oxford .
9) Jones T. (2003)-Innovating at the Edge: How Organizations Evolve and Embed Innovation Capability.Butterwork Heinemann, U. K.
10) Amidon, D. M.(1997)-Innovation Strategy for the Knowledge Economy:The Kanawakening. Butterwork-Heinemann, New Delhi, India.

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III SEMESTER
ELECTIVES
(HUMAN RESOURCE MANAGEMENT)

	LEADERSHIP AND CHANGE MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Unit I:
Organisational Leadership: Definition, Components and evaluation of leadership, factors of leadership, Situational Leadership Behaviour: Meaning, Fiedler Contingency Model, Path Goal and Normative Models - Emerging Leadership Behaviour: Transformational, Transactional and Visionary Leadership - Leadership for the new Millennium Organisations - Leadership in Indian Organisations. Leadership Effectiveness: Meaning, Reddins' 3-D Model, Hersey and Blanchard Situational Model, Driving Leadership Effectiveness, Leadership for Organisational Building.

Unit II:
Leadership Motivation, Culture: Motivation Theories for Leadership- Emerging Challenges in Motivating Employees. Motivation, Satisfaction, Performance.Organisational Culture: Meaning, Definitions, Significance, Dimensions, Managing Organisational Culture, Changing organisational Cultural.Leadership Development: Leadership development: Significance – Continuous Learning: Principles of learning to develop effective leadership – Vision and Goals for organisation: significance of goals for leaders – Charting vision and goals of Indian leaders and abroad.

Unit III:
Strategic Leadership: Leader Self management: significance - Developing self esteem and balancing emotions – Interpersonal Leadership Skills: Praise – Criticise – Communicate – Leadership Assertiveness: Circle of influence and circle of concern – Leadership with Edification: Tools of edification – Leadership and creativity: Developing creative thinking – Leadership and Team Building: Principles of team building, individual versus Group versus Teams – Leadership and Integrity: Developing character and values.

UNIT IV:
Basics of Change Management: Meaning, nature and Types of Change – change programmes – change levers – change as transformation – change as turnaround – value based change.

UNIT V:
Mapping change: The role of diagramming in system investigation – A review of basic flow diagramming techniques –systems relationships – systems diagramming and mapping, influence charts, multiple cause diagrams- a multidisciplinary approach -Systems approach to change: systems autonomy and behavior – the intervention strategy model – total project management model (TPMM). Organization Development (OD): Meaning, Nature and scope of OD - Dynamics of planned change – Person-focused and role-focused OD interventions –Planning OD Strategy – OD interventions in Indian Organizations – Challenges to OD Practioners
Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

Reference Books:

1. Peter G. Northouse, Leadership, 2010, Sage. Publication.
2. Richard L. Daft ‒Leadership‖ Cengage Learning 2005.
3. Uday Kumar Haldar ‒Leadership and Team Building‖ Oxford Higher Education 2010
4. Richard L Hughes, Robert C Ginnett, Gordon J Curphy ‒Leadrship‖ Tata Mc Graw Hill Education Private Limited 2012.
5. Peter Lornge, Thought leadership Meets Business, 1st edition, 2009, Cambridge.
6.Cummings: ‒Theory of Organisation Development and Change‖, Cengage Learning, New Delhi, 2013.

7. Robert A Paton: Change Management, Sage Publications, New Delhi, 2011. 3. NilanjanSengupta: Managing Changing Organisations, PHI Learning, New Delhi, 2009

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	PERFORMANCE EVALUATION AND COMPENSATFION MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Unit- I:

Introduction: –Definition –concerns-scope-Historical developments in performance management-Over view of performance management-Process for managing performance-Importance –Linkage of PM to other HR processes-Performance Audit.

Unit- II:

Performance Management Planning: Introduction-Need-Importance-Approaches-The Planning Process—Planning Individual Performance- Strategic Planning –Linkages to strategic planning-Barriers to performance planning-Competency Mapping-steps-Methods.

Unit-III:

Management System: objectives – Functions- Phases of Performance Management System-Competency, Reward and Electronic Performance Management Systems-Performance Monitoring and Counselling: Supervision- Objectives and Principles of Monitoring- Monitoring Process- Periodic reviews- Problem solving- engendering trust-Role efficiency- Coaching-Counselling and Monitoring- Concepts and Skills .

UNIT -IV:

Compensation: concept and definition – objectives and dimensions of compensation program – factors influencing compensation –Role of compensation and Reward in Modern organizations Compensation as a Retention strategy- aligning compensation strategy with business strategy - Managing Compensation: Designing a compensation system – internal and external equity– pay determinants - frame work of compensation policy - influence of pay on employee attitude and behaviour - the new trends in compensation management at national and international level.

UNIT V:

Compensation Structure: Compensation Structure -History and past practices, elements of ,management compensation –Types of compensation system-Performance based and Pay based structures-Designing pay structures-comparison in evaluation of different types of pay structures-Significance of factors affecting-Tax Planning –Concept of Tax planning-Role of tax planning in compensation benefits-Tax efficient compensation package-Fixation of tax liability salary restructuring.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References

1. Prem Chadha: ―Performance Management‖, Macmillan India, New Delhi, 2008.
2. Michael Armstrong & Angela Baron, –Performance Management‖: The New Realities, Jaico Publishing House, New Delhi, 2010.
3. T.V.Rao, –Appraising and Developing Managerial Performance‖, Excel Books, 2003.
4. David Wade and Ronad Recardo, –Corporate Performance Management‖, Butter Heinemann, New Delhi, 2002.
5. Dewakar Goel: –Performance Appraisal and Compensation Management‖, PHI Leaarning, New Delhi, 2009
6. A.M. Sarma –Performance Management Systems‖ Himalaya Publishing House, New Delhi, 2010.

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	HUMAN RESOURCE METRICS AND ANALYTICS	100	4	0	0	3

Objective of the Course: Objective of the course is to provide knowledge in developing right HR metrics and analytics based on the organizational requirements. This will lay foundation in pruning HR metrics into Analytics for effective management decisions.

Unit 1
HR Metrics Overview--Concepts, Objectives-- Historical evolution of HR metrics.--Explain how and why metrics are used in an organization--Deciding what metrics are important to your business--HR metrics design principles--Approaches for designing HR metrics--The Inside-Out Approach--The Outside-In Approach-- Align HR metrics with business strategy, goals and objectives--Link HR to the strategy map--

Unit II
Creating levels of metrics measures—HR Effeciency measures—HR Effectiveness measures--HR value / impact measures. Building HR functions metrics-- Workforce Planning Metrics--Recruitment Metrics --Training & Development Metrics-- Compensation & Benefits Metrics --Employee relations & Retention Metrics

Unit III
HR Analytics Overview -- What HR Analytics. -- Importance of HR Analytics. -- Translating HR metrics results into actionable business decisions for upper management (Using Excel Application exercises, HR dashboards)-- HR information systems and data sources-- HR Metrics and HR Analytics-- Intuition versus analytical thinking-- HRMS/HRIS and data sources--Analytics frameworks like LAMP-- HCM:21(r) Model.

Unit IV
Diversity Analysis-- Equality, diversity and inclusion, measuring diversity and inclusion, Testing the impact of diversity, Workforce segmentation and search for critical job roles.. Recruitment and Selection Analytics--Evaluating Reliability and validity of selection models, Finding out selection bias.Predicting the performance and turnover. Performance Analysis--Predicting employee performance, Training requirements, evaluating training and development.

UNIT V:
Optimizing selection and promotion decisions. Monitoring impact of Interventions-- Tracking impact interventions-- Evaluating stress levels and value-change-- Formulating evidence based practices and responsible investment-- Evaluation mediation process, moderation and interaction analysis.

References

1. Edwards Martin R, Edwards Kirsten (2016),‒Predictive HR Analytics: Mastering the HR Metric‖,Kogan Page Publishers, ISBN-0749473924
2. Fitz-enz Jac (2010), ‒The new HR analytics: predicting the economic value of your company‘s human capital investments‖, AMACOM, ISBN-13: 978-0-8144-1643-3
3. Fitz-enz Jac, Mattox II John (2014), ‒Predictive Analytics for Human Resources‖, Wiley, ISBN- 1118940709
4. Bernard Marr(2018), Data Driven HR:How to use Analytics and metrics to data driven performance,Kindle Edition.

5. John Sullivan(2003)HR Metrics The World Class Way, Kennedy Information ISBN 978-1932079012

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	HUMAN CAPITAL MANAGEMENT	100	4	0	0	3

Unit I:

Economic theories of Human Capital: Nature and Role of Human Capital; The Human Capital Model; Predictions of Human Capital Approach; Socio-economic relevance of labour problems in changing scenario; Evolution of organized labour; Industrialization and Development of Labour Economy; Growth of Labour Market in India in the globalised stetting.

Unit II:

Accounting Aspects of Human Capital – Cost Based Models: Meaning, Basic Premises, Need and Significance of HRA, Advantages and Limitation of HRA; Monetary and Non-Monetary Models; Cost Based Models- Acquisition Cost Method, Replacement Cost Model, Opportunity Cost Method, standard cost method, Current Purchasing Power Method (C.P.P.M.); Comparison of Cost incurred on Human capital and the contributions made by them in the light of productivity and other aspects.

Unit III:

Accounting Aspects of Human Capital – Value Based Models: Value Based Models - Hermanson‘sUnpurchased Goodwill Method, Hermanson‘s Adjusted Discount Future Wages Model, Lev and Schwartz Present Value of Future Earnings Model, Flamholtz‘s Stochastic Rewards Valuation Model, Jaggi and Lau‘s Human Resource Valuation Model, Robbinson‘s Human Asset Multiplier Method, Watson‘s Return on Effort Employed Method, Brummet, Flamholtz and Pyle‘s Economic Value Method of Group Valuation, Morse‘s Net Benefit Method; Recent developments in the field of Human Asset/Capital Accounting.

Unit IV:

Quality of Work Life: Workers‘ Participation in Management - Worker‘s Participation in India, shop floor, Plant Level, Board Level- Quality Circles. Workers‘ education objectives - Rewarding. Employees Engagement and Empowerment-nature-types-drivers-benefits-measurement of Engagement-Empowerment.

Unit V:

Industrial Accidents and safety: meaning and definition of accident-types of industrial accidents-cost and consequences-causes and prevention of accidents- Industrial safety –statutory machineries for industrial safety-safety audit. Social Security: Introduction and types –Social Security in India, Health and Occupational safety programs- work place discipline –work place counselling-meaning –definition –types-advantages-characteristics of an effective counsellor.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References

1. I.L.O., Social & Labour aspects of Economic Development, Geneva
2. Report of the National Commission on Labour
3. Patterson & Schol., Economic Problems of Modern Life. Mc-Graw Hill Book Company.
4. Walter Hageabuch, Social Economics, Cambridge University Press.
5. S. Howard Patterson, Social Aspects of Industry.
6. Millis and Montgonery, Labours Progress and some Basic Labour Problems. Mc -Graw Hill Book Company.
7. Flamholtz, Eric, Human Resource Accounting, Dickenson Publishing Co., Califf.
8. Hermanson, Roger H. Accounting for Human Assets, Occasionals Paper No.14, Graduate School of Business Administration, Michigan State University. 9. Flamholtz, Eric G., Human Resource Accounting: Advances in Concepts, Methods and Applications, Jossey Eass Publishers, San Francisco, London.
10. Likert, Rensis, The Human Organisation: Its Management and Value, McGraw Hill Book Co., New York, N.Y.
11. Ganguli, Prabuddha, Intellectual Property Rights: Unleashing the Knowledge Economy, Tata McGraw-Hill Publishing Co. Ltd., New Delhi.

12. Chakraborty, S.K., Human Asset Accounting: The Indian Context in Topics in Accounting and Finance, Oxford University Press.

	MANPOWER PLANNING, RECRUITMENT, AND SELECTION	**100**	**4**	**0**	**0**	**3**

Unit I

Basics of Human Resource Planning: Macro Level Scenario of Human Resource Planning- Factors affecting HRP -Concepts and Process of Human Resource Planning - Methods and Techniques of Demand Forecasting - Methods and Techniques of Supply Forecasting - Micro Level Planning.

Unit II

Manpower Planning, Human Resource Planning and Business Environment; Defining and Drawing Manpower Systems- Stocks and Flows; Human Resource Distribution Mapping and Identifying Surplus; Downsizing Strategies- Legal and voluntary framework.

Unit III

Analysis, design and evaluation of job: nature of job analysis, process, methods of collecting job data, potential problems with job analysis-job design-contemporary issues-job evaluation – process-methods.

Unit IV

Recruiting and selecting the right talent: recruitment and selection needs-recruitment process-alternative to recruitment-selection process-evaluation-barriers to effective selection-making the selection effective.

Unit V

Training and Development: Overview of training and development systems, organizing training department, training and development policies, linking training and development to company‘s strategy, Requisites of Effective Training, Training Needs Assessment (TNA) Designing Training and Development Programs Evaluation of Training and Development.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Prior, John, Handbook of Training and Development, Jaico Publishing House, Bombay.
2. Trvelove, Steve, Handbook of Training and Development, Blackwell Business.
3. Warren, M.W. Training for Results, Massachusetts, Addison-Wesley.
4. Craig, Robert L., Training and Development Handbook, McGraw Hill.
5. Garner, James, Training Interventions in Job Skill Development, Addison-Wesley.
6. Mathis, Jackson,Tripathy:―Human Resource Management:Asouth-Asin Perspective‖, Cengage Learning, New Delhi, 2013
7. Subba Rao P: ―Personnel and Human Resource Management-Text and Cases‖, Himalaya Publications, Mumbai, 2013.

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IV SEMESTER
ELECTIVE PAPERS
Human Resource Management

	LABOR WELFARE AND EMPLOYMENT LAWS	**100**	**4**	**0**	**0**	**3**

UNIT I:
Labour Welfare: Concept, scope and philosophy, principles and approaches of labour welfare, Indian constitution on labour, Agencies of labour welfare and their role. Impact of ILO on labour welfare in India.

UNIT II:
Labour welfare programmes: Statutory and non-statutory, extra mural and intra mural, Central Board of Workers‘ Education; Workers‘ Cooperatives- Welfare Centres -Welfare Officers‘ Role, Status and Function, Signs of poor welfare.

UNIT III:
Labour Legislation: Objectives-Principles-Classification-Evaluation of Labour legislation in India- Factories Act 1948, Definitions - Objectives of Act - Factory Inspectorate: – Measures to be taken by Factories for Health, Safety and Welfare of Workers - Working Hours - Wage and Compensation - Provisions Relating to Hazardous Processes - Annual Leave with Wages - Special Provisions - Obligations by Employer and Employee - Offences and Penalties., Contract Labour (Regulation and Abolition) Act 1970 and A.P.Shops and Establishments Act.

UNIT IV:
Industrial Relations Legislation: Industrial Disputes Act 1947Concept, objectives, Types of Strikes and their Legality – Authorities under the Act and their Duties – Voluntary Reference of Disputes to Arbitration – Types of Strikes and Lock-outs Wages for Strike and Lock-out Period– Change in Conditions of Service. Industrial Employment (standing orders) Act 1946 Certification of Draft Standing Orders – Appeals – Date of Operation of Standing Orders – Posting of Standing Orders – Payment of Subsistence Allowance.

UNIT V:
Trade Unions Act 1926. Definitions - Scope and Significance – Characteristics - Types of Trade Unions - Reasons for Joining Trade Unions - Advantages and Disadvantages of Trade unions- Legislations of Trade Unions- Rights and Privileges. Wage and Social Security Legislation: Payment of wages Act 1936 - Minimum wages Act 1948 - Payment of Bonus Act 1966 -. Payment of Gratuity Act 1972 - Workmen‘s Compensation Act 1923 - Employees State Insurance Act 1948 - Maternity Benefit Act 1961 and Employees Provident Fund and Miscellaneous Provisions Act 1952.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Govt. of India (Ministry of Labour, 1969). Report of the Commission on Labour Welfare, New Delhi: Author.
2. Govt. of India (Ministry of Labour, 1983). Report on Royal Commission on Labour in India, New Delhi: Author.
3. Malik, P.L: –Industrial Law‖, Eastern Book Company. Laknow,1977

4. Moorthy, M.V: ―Principles of Labour Welfare‖, Oxford University Press, New Delhi.
5. Pant, S.C: –Indian Labour Problems‖, Chaitanya Pub. House. Allahabad.

	INTERNATIONAL HUMAN RESOURCE MANAGEMENT	**100**	**4**	**0**	**0**	**3**

UNIT I

Introduction: A Global HR Perspective in New Economy-Challenges of Globalization - Implications of Managing People and Leveraging Human Resource - Strategic Role of International HRM – Distinction between Domestic and International HRM – HR Challenges at International Level.

UNIT II

Managing International Assignments: Significance -Global HR Planning – Staffing policy – Training and development – performance appraisal –International Labour relations – Industrial democracy - Positioning Expatriate – Repatriate – factors of consideration - Strategies - Legal content of Global HRM- International assignments for Women - Problems.

UNIT III

Cross Culture Management: Importance – Concepts and issues – Understanding Diversity – Managing Diversity Cross- Cultural Theories – Hofstede‘s Model – Kluchkohn - Strodthbeck Model – Andre- Laurent‘ Theory – Cultural Issues. considerations - Problems – Skill building methods – Cross Culture Communication and Negotiation – Cross Culture Teams. Talent crunch – Indian MNCs and Challenges.

UNIT IV

Compensation Management: Objectives -Importance – Concepts- Trends - Issues – Methods – Factors of Consideration – Models – incentive methods – Approaches of Compensation in Global Assignments - global compensation implications on Indian systems - Performance Management.

UNIT V

Global Strategic Advantages through HRD: Measures for creating global HRD Climate – Strategic Frame Work of HRD and Challenges - Globalization and Quality of Working Life and Productivity – Challenges in Creation of New Jobs through Globalization- New Corporate Culture.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Subba Rao P: ‒International Human Resource Management‖, Himalaya Publishing House, Hyderabad, 2011
2. NilanjanSen Gupta: ‒International Human Resource Management Text and cases‖ Excel Books, New Delhi.
3. Tony Edwards :―International Human Resource Management‖, Pearson Education, New Delhi, 2012
4. Aswathappa K, Sadhana Dash: ‒International Human Resource Management, TMH, New Delhi,
5. Monir H Tayeb: ‒International Human Resource Management‖, Oxford Universities Press, Hyderabad, 2012.

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	EMPLOYEE RELATIONS AND ENGAGEMENT	100	4	0	0	3

UNIT I :
Industrial Relations Management: Concept-meaning and scope of IR-system frame work-Theoretical perspective- Evaluation –Background of industrial Relations in India- Influencing factors of IR in enterprise and the consequences. Globalization and IR- Recent Trends in Industrial Relations.

UNIT II:
Trade Unions: Introduction-Definition and objectives-growth of Trade Unions in India -Union recognition-Union Problems-Employees Association- Collective Bargaining –Characteristics-Importance-Principles-The process of CB-Participation in the bargaining process-Essential conditions for the success of collective bargaining –Negotiating techniques and skills.

UNIT III:
Employee Grievances: Causes of Grievances – Grievances Redressal Machinery – Discipline in Industry _ Measures for dealing with Indiscipline–Standing Orders- Code Discipline.

UNIT IV:
Industrial Disputes: Meaning, nature and scope of industrial disputes - Cases and Consequences of Industrial Disputes –Prevention and Settlement of industrial disputes in India.

UNIT V :
Employee Engagement : Concept-Definition-Elements- Factors- Levels - Driers of Employee Engagement-Measurement-Strategies- The role of managers in engaging the employees.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References

1. C.S Venkataratnam: ‒Industrial Relations‖, Oxford University Press, New Delhi, 2011
2. Sinha: ‒Industrial Relations, Trade Unions and Labour Legislation‖, Pearson Education, New Delhi, 2013
3. Mamoria: ―Dynamics of Industrial Relations‖, Himalaya Publishing House, New Delhi, 2010
4. B.D.Singh: ‒Industrial Relations‖ Excel Books, New Delhi, 2010
5. Arun Monappa: ‒Industrial Relations‖, TMH, New Delhi. 2012
6. Prof. N.Sambasiva Rao and Dr. Nirmal Kumar: ‒Human Resource Management and Industrial Relations‖, Himalaya Publishing House, Mumbai
7. Ratna Sen: ‒Industrial Relations‖, MacMillon Publishers, New Delhi, 2011

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	HUMAN RESOURCES DEVELOPMENT	100	4	0	0	3

UNIT-I:
Concept of HRD-objectives-Structure-Need-Scope- HRD in selected industrial organisations-significance-HRD functions-Framework-Techniques-Attributes of a HRD manager.

UNIT – II:
HRD Strategies:- An Overview - Strategies - Training and Development - Methods - Evaluation of training programmes. HRD Process Model: Methods of Implantation, Evaluation of HRD programmes. Identification of HRD needs and Design and development of HRD programmes.

UNIT – III:
HRD interventions: Mentoring for employee development: Concepts of Mentoring-Perspectives-Mentoring relationship-Outcomes of Mentoring programmes-Design and implementation of formal-mentoring programmes-Barriers to mentoring-Role of mentoring in development, understanding the role and responsibilities of mentor, mentee-Special issues in Mentoring.

UNIT – IV:
Employee counselling for HRD: Overview of counselling programmes, employee assistance programme, stress management, employee wellness and health promotion. Career Planning, management, and development: Career development stages and activities, role of individual and organization in career planning, Issues in career management.

UNIT-V :
The future of HRD and HRD Ethics: Research, practice and education of HRD for innovation and talent development and management, Role of HRD in developing ethical attitude and behaviour and development, Ethical problems with HRD roles. Applications of HRD: HRD Climate, HRD for managing organizational change, HRD for Workers (blue collar employees), HRD Audit.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Arun Monappa; Personnel Management;
2. Rudrabasava Raj M.N. : Dynamic Personnel Administration Management of Human Resources;
3. Udai Pareek, Human Resource Development;
4. S. Ravishankar & R.K. Mishra (Ed). : Management of Human Resources in Public Enterprises;
5. Haribson F, Educational Planning and Human Resources Development, International Institute for Education, UNESCO, Paris;
6. Bell DJ, Planning Corporate' Manpower, Longman;
7, Walker James W'. Human Resource Planning, MGH.

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	STRATEGIC HUMAN RESOURCE MANAGEMENT	**100**	**4**	**0**	**0**	**3**

UNIT-I

Human Resource Strategy: Introduction to Strategic Human Resource Management - Evaluation objectives and Importance of Human Resources Strategy- Strategic fit – A conceptual framework -Human Resources contribution to strategy - Strategy driven role behaviours and practices – Theoretical Perspectives on SHRM approaches - Linking business strategies to HR strategies.

UNIT-II

Strategic Human Resource Planning: Objectives, benefits, levels of strategic planning -Activities related to strategic HR Planning-Basic overview of various strategic planning models-Strategic HR Planning model-Components of the strategic plan.

UNIT-III

Strategy Implementation: Strategy implementation as a social issue-The role of Human Resource-Work force utilization and employment practices-Resourcing and Retention strategies-Reward and Performance management strategies.

UNIT-IV

Strategic Human Resource Development: Concept of Strategic Planning for HRD Levels in Strategic HRD planning-Training and Development Strategies-HRD effectiveness.

UNIT-V

Human Resource Evaluation: Overview of evaluation - Approaches to evaluation, Evaluation Strategic contributions of Traditional Areas - Evaluating Strategic Contribution of Emerging Areas-HR as a Profit centre and HR outsourcing strategy.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Charles R. Greer: ‒Strategic Human Resource Management‖ - A General Manager Approach - Pearson Education, Asia
2. Fombrum Charles & Tichy: ‒Strategic Human Resource Management‖ - John Wiley Sons, 1984
3. Dr. Anjali Ghanekar ‒Strategic Human Resource Management‖ Everest Publishing House, Pune 2009
4. Tanuja Agarwala ‒Strategic Human Resource Management‖ Oxford University Press, New Delhi 2014 www.universityupdates.in || www.android.universityupdates.in || www.ios.universityupdates.in www.universityupdates.in || www.android.universityupdates.in || www.ios.universityupdates.in University Updates
5. Srinivas R Kandula ‒Strategic Human Resource Development‖ PHI Learning PVT Limited, New Delhi 2009
6. Dreher, Dougherty ‒Human Resource Strategy‖ Tata Mc Graw Hill Publishing Company Limited, New Delhi 2008

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III. SEMESTER ELECTIVES
FINANCE

MBA III SEMESTER

	INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: To enlighten the students with the Concepts and Practical applications of Security Analysis and Portfolio Management

Unit-I: Concept of Investment, Investment Vs Speculation, and Security Investment Vs Non-security Forms of Investment-Investment Environment in India. Investment Process - Sources of Investment Information, Security Markets – Primary and Secondary – Types of securities in Indian Capital Market, Market Indices. Calculation of SENSEX and NIFTY.

Unit-II: Return and Risk – Meaning and Measurement of Security Returns. Meaning and Types of Security Risks: Systematic Vs Non-systematic Risk. Measurement of Total Risk - Intrinsic Value Approach to Valuation of Bonds - Preference Shares and Equity Shares.

Unit-III: Fundamental Analysis – Economy, Industry and Company Analysis, Technical Analysis – Concept and Tools and Techniques Analysis – Technical Analysis Vs Fundamental Analysis - Efficient Market Hypothesis; Concept and Forms of Market Efficiency.

Unit-IV: Elements of Portfolio Management, Portfolio Models – Markowitz Model, Efficient Frontier and Selection of Optimal Portfolio. Sharpe Single Index Model and Capital Asset Pricing Model, Arbitrage Pricing Theory.

Unit-V: Performance Evaluation of Portfolios; Sharpe Model – Jensen‘s Model for PF Evaluation, Evaluation of Mutual Fund.

Suggested Readings:

1. Fisher DE and Jordon RJ, Security Analysis and Portfolio Management,PHI, New Delhi
2. Ambika Prsasad Dash, Security Analysis and Portfolio Management,IK Int Pub House, New Delhi
3. Hirt and Block, Fundamentals of Investment Management, TataMcGrawHill, New Delhi
4. Reily Frank K, Investment Analysis and Portfolio Management,Cengage, New Delhi
5. Bodie,Kane,Marcus and Mohanty, Investments, TataMcGraw Hill, New Delhi

6. Peter Lynch, One Up on Wall Street, Simon & Schuster Paperbacks, New York
7. Sharppe W, Alexander,GJ., & Baily JV., Investments, TMH, New Delhi
8. Avadhani, VA, SAPM, Himalaya Publishers.
9. Bhalla, VK Investment Management, S.Chand., New Delhi
10. Preeti Singh, Investment Management, Himalaya Publishers.
11. Timothy Vick, How to Pick Stocks like Warren Buffett, TMH, New Delhi

	MANAGING BANKS AND FINANCIAL INSTITUTIONS	**100**	**4**	**0**	**0**	**3**

Unit – I: Financial System in India: Introduction - Evolution of Banking - Phases of development - RBI and the Financial System - Committees on Banking Sector Reforms - Prudential Banking -- RBI Guidelines and directions.

Unit – II: Organization, Structure and Functions of RBI and Commercial Banks: Introduction - Origination, Structure and Functions of RBI and Commercial Banks - Role of RBI and Commercial Banks - Lending and Operation policies - Banks as Intermediaries - NBFCs - Growth of NBFCs - FDI in Banking Sector - Banking Regulations - Law and Practice.

Unit – III: Risk Management in Banks : Introduction - Asset/Liability Management Practices - Credit Risk Management - Credit Risk Models - Country Risk Management - Insurance Regulations and Development Authority (IRDA).

Unit – IV: Financial Institutions and Development Banking : Introduction - Origin, Growth and Lending Policies of Terms lending Institutions - Working of IDBI - IFCI - STCs - SIDBI - LIC - GIC - UTI - Role of Financial Institutions in Capital Market.

Unit – V: New Financial Instruments and Institutions : Private Banks - Old generation and New generation private banks - Foreign Banks - NSE - Depositories - DFHI - New Equity and Debt Instruments - SEBI and RBI guidelines.

Suggested Readings:

1. Koch W Timothy and Scott S Macdonald, "Bank Management" Thomson (South-Western), Bangalore 2005 (Text Book)
2. Khan M Y., "Indian Financial System", Tata Mc Graw Hill, New Delhi, 2004
3. Srivastava, RM ., "Management of Indian Financial Institutions", Himalaya Publishing House, Mumbai, 2005
4. Avadhani V A., "Investments and Securities Markets in India", Himalaya Publishing House, Mumbai, 2004
5. Srinivasan NP and Saravanavel, P., "Development Banking in India and Abroad", Kalyani Publications, Ludhiyana, 2001

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	FINANCIAL MARKETS AND SERVICES	**100**	**4**	**0**	**0**	**3**

Objective: To enlighten the students with the Concepts and Practical dynamics of Financial Markets and Financial Services

UNIT – I : Structure of Financial System – role of Financial System in Economic Development – Financial Markets and Financial Instruments – Capital Markets – Money Markets – Primary Market Operations – Role of SEBI – Secondary Market Operations – Regulation – Functions of Stock Exchanges – Listing – Formalities – Financial Services Sector Problems and Reforms.

UNIT – II : Financial Services: Concept, Nature and Scope of Financial Services – Regulatory Frame Work of Financial Services – Growth of Financial Services in India – Merchant Banking – Meaning-Types – Responsibilities of Merchant Bankers – Role of Merchant Bankers in Issue Management – Regulation of Merchant Banking in India. Leasing – types of Leases – Evaluation of Leasing Option Vs. Borrowing.

UNIT – III : Venture Capital – Growth of Venture Capital in India – Financing Pattern under Venture Capital – Legal Aspects and Guidelines for Venture Capital. Factoring, Forfeiting and Bill Discounting – Types of Factoring Arrangements – Factoring in the Indian Context.

UNIT – IV : Credit Rating – Meaning, Functions – Debt Rating System of CRISIL, ICRA and CARE. Mutual Funds – Concept and Objectives, Functions and Portfolio Classification, Organization and Management, Guidelines for Mutual Funds. Working of Public and Private Mutual Funds in India. Debt Securitization – Concept and Application – De-mat Services-need and Operations-role of NSDL and CSDL.

UNIT – V : Microfinance: Over view of Microfinance, Indian Rural financial system, introduction to Microfinance, Microfinance concepts, products, (savings, credit, insurance, pension, equity, leasing, hire-purchase service, Microfinance in kind, Micro-remittances, MicroSecuritization. Microfinance models: Generic models viz. SHG, Grameen, and Co-operative, variants SHG NABARD model, SIDBI model, SGSY model, Grameen Bangladesh model, credit unions. Poverty and Need of Microfinance. Gender issues in Microfinance

Suggested Readings:

1. Bhole & Mahakud, Financial Institutions and Market, TMH, New Delhi
2. V.A.Avadhani, Marketing of Financial Services, Himalayas Publishers, Mumbai
3. DK Murthy, and Venugopal, Indian Financial System, IK Int Pub House
4. Anthony Saunders and MM Cornett, Fin Markets & Institutions,TMH,
5. Edminister R.D., Financial Institution, Markets and Management.
7. Punithavathy Pandian, Financial Markets and Services, Vikas, New Delhi

8. Vasanth Desai, Financial Markets & Financial Services, Himalaya, Mumbai

9. Meir Khan – Financial Institutions and Markets, Oxford Press.

	MERGERS, ACQUISITIONS AND CORPORATE RESTRUCTURING	**100**	**4**	**0**	**0**	**3**

Objective:

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

Unit – II: M & A – A strategic perspective- industry life cycle and product life cycle analysis in M&A decision, strategic approaches to M&A- SWOT analysis, BCG matrix. Takeovers, types, takeover strategies, - Takeover defences – financial defensive measures – methods of resistance – anti-takeover amendments – poison pills Legal aspects of Mergers/amalgamations and acquisitions/takeovers- Combination and Competition Act- Competition Commission of India (CCI), The SEBI Substantial Acquisition of Shares and Takeover code

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

Unit – IV: Methods of financing mergers – cash offer, share exchange ratio – mergers as a capital budgeting decision Synergies from M&A: Operating and Financial synergy Accounting for amalgamation – amalgamation in the nature of merger and amalgamation in the nature of purchase- pooling of interest method, purchase method – procedure laid down under Indian companies act of 2013.

Unit – V: Corporate restructuring – significance - forms of restructuring – joint ventures – sell off and spin off – divestitures – equity carve out – leveraged buy outs (LBO) – management buy outs – master limited partnership– Limited Liability Partnership (LLP) in India: Nature and 91 incorporation of LLP-De merger- strategic alliance buyback of shares.

Suggested Readings:

1. Value Creation from Mergers and Acquisitions, Sudi Sudarsanam – 1/e, Pearson Education, 2003.
2. Merger Acquisitions & Corporate Restructuring – Chandrashekar Krishna Murthy & Vishwanath. S.R – Sage Publication.
3. Mergers, acquisitions and Corporate Restructuring, NishikantJha, Himalaya Publishing House, 2011.
4. Corporate Restructuring, Bhagaban Das, Debdas Raskhit and Sathya Swaroop Debasish,

Himalaya Publishing, 2009.
5. Business Legislation for Management, M.C. Kuchhal and Vivek Kuchhal, 4/e, Vikas Publishing House, 2013.

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	TAXATION	**100**	**4**	**0**	**0**	**3**

Objective: To acquaint the students with the theoretical and practical aspects of direct taxes including wealth taxes.

Unit –I: General Principles of Tax – Direct and Indirect Taxes – State Power to Levy Tax – Tax System – Provisions of Income Tax Act 1961 – Finance Act – Basic Concepts.

Unit- II: Income Tax – Deductions, Computation, Payment and Accounting- deductions from Gross Total Income, Rebates and Reliefs and Computation of Taxable Income and Tax Payable, Filing of Income Tax Returns – Provisions, Forms and Due Dates, Notices and Assessments.

Unit III: Tax Planning for Firms, HUFs and AOPs- partnership firm under Income Tax Law, tax deductions available to firms, Provisions relating to interest and remuneration paid to partner, Computation of partnership firms' book profit, Set-off and carry-forward of losses of Firms and taxation of HUFs and Associations of Persons (AOPs).

Unit IV: Corporate Taxation- Computation of taxable income, Carry-forward and set-off of losses for companies, Minimum Alternative Tax (MAT), Set-off and Carry-forward of Amalgamation Losses, Tax Planning for Amalgamation, Merger and Demerger of Companies, Tax Provisions for Venture Capital Funds

Unit V: Tax Audit and Accounting for Income Tax - Tax Audit, Qualities and Qualifications Required in Tax Auditors, Forms, Reports and Returns and Tax Reporting and Disclosure in Financial Statements

Suggested Readings:

1. Dr. V.K. Singhania & Dr. Kapil Singhania, Direct Taxes Law and Practice, Taxman Publications Pvt. Ltd., New Delhi.

2. Bhagavati Prasad, Direct Taxes Law and Practice, Wishwa Prakashan, New Delhi.

3. Dinkar Pagare, Income Tax and Practice, Sultan Chand and Sons, New Delhi.

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FINANCE

MBA IV SEMESTER

	FINANCIAL DERIVATIES	**100**	**4**	**0**	**0**	**3**

Objective: To enlighten the students with the concepts and practical applications of derivatives in the security markets.

Unit - I: Introduction to Financial Derivatives – Meaning and Need – Growth of Financial Derivatives in India – Derivative Markets – Participants- Functions – Types of Derivatives – Forwards – Futures – Options-Swaps – The Regulatory Framework of Derivatives Trading in India.

Unit - II: Features of Futures –Differences Between Forwards and Futures – Financial Futures – Trading – Currency Futures – Interest Rate Futures – Pricing of Future Contracts- Value at Risk (VaR)-Hedging Strategies – Hedging with Stock Index Futures – Types of Members and Margining System in India – Futures Trading on BSE & NSE.

Unit - III: Options Market – Meaning & Need – Options Vs Futures -Types of Options Contracts – Call Options – Put Options- Trading Strategies Involving Options – Basic Option Positions – Margins – Options on Stock Indices – Option Markets in India on NSE and BSE.

Unit - IV: Option Pricing – Intrinsic Value and Time Value- Pricing at Expiration – Factors Affecting Options pricing- Put-Call Parity Pricing Relationship- Pricing Models - Introduction to Binominal Option Pricing Model – Black Scholes Option Pricing Model.

Unit – V: Swaps – Meaning – Overview – The Structure of Swaps – Interest Rate Swaps – Currency Swaps – Commodity Swaps – Swap Variant – Swap Dealer Role –Equity Swaps – Economic Functions of Swap Transactions - FRAs and Swaps.

Suggested Readings:

1. Hull C. John, ‒Options, Futures and Other Derivatives‖, Pearson Educations Publishers,
2. David Thomas. W & Dubofsky Miller. Jr., Derivatives valuation and Risk Management, Oxford University, Indian Edition.
3. ND Vohra & BR Baghi, Futures and Options, Tata McGraw-Hill Publishing Company Ltd.
4. Red Head: Financial Derivatives: An Introduction to Futures, Forward, Options‖ Prentice Hall of India.
5. David A. Dubofsky, Thomas W. Miller, Jr.: Derivatives: Valuation and Risk Management, Oxford University Press.
6. Sunil K.Parameswaran, ‒Futures Markets: Theory and Practice‖ Tata-McGraw-Hill Publishing Company Ltd.
7. D.C. Patwari, Financial Futures and Options, Jaico Publishing House.
8. T.V. Somanathan, Derivatives, Tata McGraw-Hill Publishing Company Ltd.
9. NSE Manual of Indian Futures & Options & www. Sebi.com
10. S.C. Gupta, Financial Derivatives: Theory, Concepts and Problems, Prentice Hall of India.

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	GLOBAL FINANCIAL MANAGEMENT	100	4	0	0	3

Objective: to enlighten the students with the Concepts and Practical applications of Gobal Financial Management.

Unit I : International Monetary and Financial System: Evolution; Breton Woods Conference and Other Exchange Rate Regimes; European Monetary System, South East Asia Crisis and Current Trends.

Unit II : Foreign Exchange Risk: Transaction Exposure; Accounting Exposure and Operating Exposure – Management of Exposures – Internal Techniques, Management of Risk in Foreign Exchange Markets: Forex Derivatives – Swaps, futures and Options and Forward Contracts.

Unit III : Features of Different International Markets: Euro Loans, CPs, Floating Rate Instruments, Loan Syndication, Euro Deposits, International Bonds, Euro Bonds and Process of Issue of GDRs and ADRs.

Unit IV : Foreign Investment Decisions : Corporate Strategy and Foreign Direct Investment; Multinational Capital Budgeting; International Acquisition and Valuation, Adjusting for Risk in Foreign Investment.

Unit V: International Accounting and Reporting; Foreign Currency Transactions, Multinational Transfer Pricing and Performance Measurement; Consolidated Financial Reporting.

Suggested Readings:

1. Buckley Adrin, Multinational Finance, 3rd Edition, Engle Wood Cliffs, Prentice Hall of India.
2. S.P.Srinivasan, B.Janakiram, International Financial Management, Wiley India, New Delhi.
3. Clark, International Financial Management, Cengage, ND
4. V.Sharan, International Financial Management, 3rd Edition, Prentice Hall of India.
5. A.K.Seth, International Financial Management, Galgothia Publishing Company.
6. P.G.Apte, International Financial Management, Tata McGrw Hill, 3rd Edition.
7. Bhalla, V.K., International Financial Management, 2nd Edition, New Delhi, Anmol, 2001.
8. V.A.Avadhani, International Financial Management, Himalaya Publishing House.
9. Bhalla, V.K., Managing International Investment and Finance, New Delhi, Anmol, 1997.

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	FINANCIAL RISK MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: To equip the students with adequate knowledge and Skill to understand and manage the risk and uncertainties to which financial institutions are exposed to.

Unit – I: Introduction The concept of Risk, Nature, Need and scope of risk. Source, measurement, identification and evaluation of Risk. Types of risk–Product market risk and capital market risk. Possible Risk events, Risk Indicators, Risk Management Process–pre-requisites and fundamentals. Misconceptions of Risk. An integrated approach to Corporate Risk Management. Risk management approaches and methods. A comprehensive view of Risk in Financial Institutions. Risk reporting process–internal and external.

Unit – II: Measurement and Management of Risk: Value at risk (VaR): The concept, computation, stresses testing, back testing. Cash flow at risk (CaR): VaR and CaR to make investment decisions. Managing risk when risk is measured by VaR or CaR Non-Insurance methods of Risk Management-Risk Avoidance, Loss Control, Risk Retention and Risk Transfer. Asset-Liability Management (ALM): evolution & concept, RBI guidelines. Capital Adequacy. Management of interest rate risk, liquidity risk, credit risk and exchange rate risk.

Unit – III: Techniques and Tools of Risk Management: Forward contracts and Futures contracts The concept of Derivatives and types of Derivatives. The role of Derivative securities to manage risk and to exploit opportunities to enhance returns. Individuals, speculators, hedgers, arbitrageurs and other participants in Derivatives Market. Forward contracts: Definition, features and pay-off profile of Forward contract. Valuation of forward contracts. Forward Contracts to manage Commodity price risk, Interest rate risk and exchange rate risk. Limitations of Forward contract. Futures contracts: Definition. Clearing house, margin requirements, marking to the market. Basis and convergence of future price to spot price. Valuation of Futures contract. Differences between forward contracts and futures contracts. Risk management with Futures contracts–the hedge ratio and the portfolio approach to a risk–minimizing hedge.

Unit – IV: Techniques and Tools of Risk Management: SWAPS Definition, types of swaps. Interest rate swaps, Currency swaps. Interest rate Swaps: Mechanics of Interest rate swaps .Using Interest rate Swaps to lower borrowing costs, hedge against risk of rising and falling interest rates. Valuation of interest rate Swaps. Pricing of Interest rate swaps at origination and valuing of Interest rate swaps after origination. Currency Swaps: Types of Currency Swaps. Valuation of currency swaps. Using Currency Swaps to lower borrowing costs in foreign country, to hedge against risk of a decline in Revenue, to hedge against risk of an increase in Cost, to hedge against risk of a decline in the value of an asset, to hedge against risk of a rise in the value of a liability. Pricing of currency swap at origination and valuing of currency swap after origination.

Unit – V: Techniques and Tools of Risk Management: Options Definition of an option. Types of options: call option, put option, American option and European option. Options in the money, at the money and out of the money. Option premium, intrinsic value and time value of options. Pricing of call and put options at expiration and before expiration. Options on stock indices and currencies. The Binominal option pricing model (BOPM): assumptions - single and two period models. The Black & Scholes option pricing model (BSOPM): assumptions.

Suggested Readings:

1. Dun and Bradstreet, ‑Financial Risk Management‖, 2007, TMH, Delhi.
2. Paul Hopkins, Kogan Page, ‑Fundamentals of Risk Management‖, 2010, Institute of Risk Management.

3. Ravi Kumar, ―Asset Liability Management‖, Vision Books Pvt. Ltd.

4. David. A. Dubofsky & Thomas. W. Miller, Jr., ―Derivatives Valuation and Risk Management‖, 2003, Oxford University Press.

5. Jean-Philippe Bouchaud and Mark Potters, ―Theory of Financial Risk and Derivative Pricing‖, 2009, 2nd Ed. Cambridge press

6. John C. Hull & Sankarshan Basu, ―Options, Futures and Other Derivatives‖, 7th Ed, Pearson Education.

7. ―Theory and Practice of Treasury and Risk Management in Banks‖, Indian Institute of Banking and Finance, March 2006, Taxmann

8. Peter S. Rose & Sylvia C. Hudgins, ―Bank Management & Financial Services‖, 7th Ed, Tata McGraw-Hill

9. Rene. M. Stulz, ―Risk Management & Derivatives‖, 2003, Thomson Southwestern.

10. Jayanth Rama Varma, ―Derivatives and Risk Management‖, TMH.

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	STRATEGIC FINANCIAL MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: To enlighten the students with the Concepts and Practical applications of Strategic Financial Management., with particular reference to the financial strategy and value of the enterprise.

Unit-1: Financial Goals and Strategy – Shareholder Value Creation (SCV): Market Value Added (MVA) – Market-to-Book Value (M/BV) – Economic Value Added (EVA) – Managerial Implications of Shareholder Value Creation.

Unit-II: Financial Strategy for Capital Structure: Leverage Effect and Shareholders' Risk – Capital Structure Planning and Policy – Financial Options and Value of the Firm – Dividend Policy and Value of the Firm.

Unit-III: Investment Strategy – Techniques of Investment Appraisal Under Risk and Uncertainty – Risk Adjusted Net Present Value – Risk Adjusted Internal Rate of Return – Capital Rationing – Decision Tree Approach for Investment Decisions – Evaluation of Lease Vs Borrowing Decision.

Unit-IV: Merger Strategy – Theories of Mergers – Horizontal and Conglomerate Mergers – Merger Procedure – Valuation of Firm – Financial Impact of Merger – Merge and Dilution Effect on Earnings Per Share – Merger and Dilution Effect on Business Control.

Unit-V: Takeover Strategy – Types of Takeovers – Negotiated and Hostile Bids – Takeover Procedure – Takeover Defenses – Takeover Regulations of SEBI – Distress Restructuring Strategy – Sell offs – Spin Offs – Leveraged Buyouts.

Suggested Readings:

1. Van Horn, JC, Financial Management and Policy, Prentice Hall,New Delhi
2. PG Godbole, Mergers, Acquisitions and Corporate Restructuring, Vikas, New Delhi
3. Weaver, Strategic Corporate Finance, Cengage, ND
4. Weston JF, Chung KS & Heag SE., Mergers, Restructuring & Corporate Control, Prentice Hall.
5. GP Jakarthiya, Strategic Financial Management, Vikas, New Delhi
6. Coopers & Lybrand, Strategic Financial: Risk Management, Universities Press (India) Ltd.
7. Robicheck, A, and Myers, S., Optimal Financing Decisions, Prentice Hall Inc.
8. James T.Gleason, RiskL The New Management Imperative in Finance, A Jaico Book.

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	BEHAVIOURAL FINANCE	100	4	0	0	3

Objective: To help students appreciate the limitations of _rational' models of investment decision making; To introduce students to an alternate framework for understanding price discovery in the markets; and to help students identify persistent or systematic behavioral factors that influence investment behavior

Unit – I Introduction to Behavioral finance – Nature, scope, objectives and application; Investment Decision Cycle: Judgment under Uncertainty :Cognitive information perception - Peculiarities (biases) of quantitative and numerical information perception - Weber law - Subjective probability – Representativeness – Anchoring - Asymmetric perception of gains and losses framing and other behavioral effects - Exponential discounting - Human economic behavior - Discount factors for short and long horizons - Experimental measurement of the discount factor - Hyperbolic discounting.

Unit – II: Utility/ Preference Functions: Expected Utility Theory [EUT] and Rational Thought: Decision making under risk and uncertainty - Expected utility as a basis for decision-making – Theories based on Expected Utility Concept – Decisionmaking in historical prospective - Allais and Elsberg's Paradoxes - Rationality from an economics and evolutionary prospective – Herbert Simon and bounded rationality- Investor rationality and market efficiency - Empirical data that questions market efficiency.

Unit –III: Behavioral Factors and Financial Markets: The Efficient Markets Hypothesis – Fundamental Information and Financial Markets - Information available for Market Participants and Market Efficiency -Market Predictability –The Concept of limits of Arbitrage Model - Asset management and behavioral factors - Active Portfolio Management: return statistics and sources of systematic underperformance. - Fundamental information and technical analysis – the case for psychological influence.

Unit – IV: Behavioral Corporate Finance: Behavioral factors and Corporate Decisions on Capital Structure and Dividend Policy - Capital Structure dependence on Market Timing - Mergers and Acquisitions. Systematic approach to using behavioral factors in corporate decisionmaking. External Factors and Investor Behavior: Mechanisms of the External Factor influence on risk perception and attitudes - Connection to human psychophysiology and emotional regulation Active portfolio management – the source of the systematic underperformance.

Unit – V: Emotions and Decision – Making: Experimental measurement of risk-related - Measuring Risk - Emotional mechanisms in modulating risk-taking attitude - Neurophysiology of risktaking. Personality traits and risk attitudes in different domains.

Suggested Readings:

1. Behavioral Finance: Psychology, Decision-Making, and Markets", by Ackert and Deaves.¬ The Psychology of Investing by John R.
2. Understanding Behavioral Finance by Ackert¬ Nofsinger, Pearson Prentice Hall, (4th Edition)
3. What Investors Really Want - Learn the lessons of behavioral Finance, Meir Statman,¬ McGraw-Hill
4. Handbook of Behavioral Finance – Brian R. Bruce
5. Behavioral finance - Wiley Finance - Joachim Goldberg, Rüdiger von Nitzsch
6. Plous, Scott, 1993, The Psychology of Judgment and Decision Making, Ch 10-15
7. Shleifer, Andrei, 2000, Are Financial Markets Efficient?, Chapter 1 in Inefficient
8. Markets, Oxford University Press. Ackert, L., and R. Deaves, 2010, Behavioral Finance: Psychology, Decision-Making and
9. Markets, South-Western Cengage Learning, Mason, Ohio. Nofsinger, J. R., 2001, Investment Madness, Prentice Hall.
10. Mitchell, O. S., and S. P. Utkus, eds., 2004. Pension Design and Structure: New Lessons
11. from Behavioral Finance (Oxford University Press, New York, New York). Shleifer,

Andrei (2000): Ineffcient Markets: An Introduction to Behavioral

12. Finance,Oxford University Press, Oxford. Montier, James (2002): Behavioural Finance, John Wiley & Sons, New York.
13. Plous, S. (1993). The psychology of judgment and decision-making NY: McGrawHill.\

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	CONSUMER BEHAVIOR	100	4	0	0	3

Course Objective

To make the students to understand what consumer behaviour is and the different types of Consumers and the relationship between consumer behavior and customer value, satisfaction, trust and retention

Unit – I
Introduction to Consumer Behaviour: Consumer Behaviour – Definition, Consumer and Customers, Buyers and Users, Organisations as Buyers, Development of Marketing Concept, Consumer Behaviour and its Applications in Marketing, Consumer Behaviour and Marketing Communications: Introduction, Marketing Communication Flow, Communications Process, Interpersonal Communication, Persuasive Communications,

Unit – II
Marketing Segmentation and Positioning: Introduction, Requirements for Effective Segmentation, Bases for Segmentation, Product Positioning: An Introduction, Positioning Strategy, Positioning Approaches, Positioning Errors
Consumer Motivation: Introduction, Needs and Goals, motivational Conflict, Defense Mechanisms, Motive Arousal, Motivational Theories, Maslow‘s hierarchy of needs

Unit – III
Situational Influence on Consumer‘s Decision and the Decision Models: Introduction, Nature of Situational Influence, Situational Variables, Types of Consumer Decisions, Nicosia Model of Consumer Decision-making (Conflict Model), Howard-Sheth Model (also called Machine Model), Engel, Blackwell, Miniard Model (also called Open System)

Unit – IV
Consumer Personality: Introduction, Self-concept, personality Theories, Brand Personality, emotions Consumer Perception: Introduction, Sensation (Exposure to Stimuli), Perceptual Selection, Perceptual Organisation, Factors that Distort Individual Perception, Price Perceptions, Perceived Product and Service Quality, Consumer Risk Perceptions

Unit – V
Consumer Decision-making Process – Problem Recognition, Information Search and Evaluation of Alternatives: Introduction, Problem Recognition, Information Search, Evaluation of Alternatives. Outlet Selection, Purchase and Post Purchase Behaviour, Introduction, Outlet Selection and Purchase, Post Purchase Behaviour

Suggested References:

1. Ramneek Kapoor, Nnamdi O Madichie: ‒Consumer Behaviour Text and Cases‖, TMH, New Delhi, 2012.

2. Ramanuj Majumdar: ‒Consumer Behavior insight from Indian Market‖, PHI Learning, New Delhi, 2011.

3. M.S.Raju: ‒Consumer Behavior Concepts, applications and Cases‖, Vikas Publishing House, New Delhi, 2013.

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	RETAIL MANAGEMENT	100	4	0	0	3

Course Objective:

Objective of retail management is creating and developing services and products that meet the specific needs of customers and offering these products at competitive, reasonable prices that will still yield profits.

Unit – I
Introduction to Retailing: Introduction, Meaning of Retailing, Economic Significance of Retailing, Retailing Management Decision Process, Product Retailing vs. Service Retailing, Retailing Marketing Environment: Elements in a Retail Marketing Environment, Environmental Issues, , Indian vs. Global Scenario

Unit – II
The Retail Marketing Segmentation: Introduction, Importance of Market, Segmentation in Retail, Targeted Marketing Efforts, Criteria for Effective Segmentation, Dimensions of Segmentation, Positioning Decisions , Limitations of Market Segmentation
Store Location and Layout: Introduction, Types of Retail Stores Location, Factors Affecting Retail Location Decisions, Country/Region Analysis, Trade Area Analysis, Site Evaluation, Site Selection, Location Based Retail Strategies

Unit – III
Store Location and Layout: Introduction, Target Market and Retail Format, Gauging Growth Opportunities, Building a Sustainable Competitive Advantage, the Strategic Retail Planning Process, Differentiation Strategies, Positioning Decisions,

Retail Pricing- Introduction, Establishing Pricing Policies, Factors Influencing Pricing, Pricing Strategies, Psychological pricing, Mark-up and Mark-down Pricing

Unit – IV
Customer Relationship Management in Retailing-Introduction, Benefits of Relationship Marketing, Management of Relationship, Principles of CRM, Customer Relationship Management Strategies, Components of CRM, Customer Service in Retailing, CRM and Loyalty Program

Understanding Integrated Marketing Communication, - Integrated marketing process, Tools of IMC, Upcoming tools of IMC, Factors influencing the Increased use of sales promotion

Unit – V
International Retailing- Introduction, Stages in Retail Global Evolution, Reasons for Going Global, Benefits of Going Global, Other Opportunities and Benefits of Going Global, Market Entry Methods

Suggested References:

1. Sheikh and Kaneez Fatima, ‒Retail Management‖, Himalaya Publishing House, Mumbai, 2012
2. A.J. Lamba:‖The Art of Retailing‖, Tata McGraw Hill Education Pvt. Ltd. N. Delhi.2011
3. Sivakumar, A, ‒Retail Marketing‖, Excel Books, New Delhi, 2007

4. Swapna Pradhan, ―Retail management‖, Tata McGraw Hill Education Pvt. Ltd. New Delhi, 2012

	CUSTOMER RELATIONSHIP MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Course Objective

- To provide a conceptual understanding of CRM, its processes, and structure.

Unit – I
Customer Relationship Management Fundamentals: Definition and Significance of Customer Relationship Marketing, Theoretical perspectives of relationship, Evolution of Relationship marketing, Stages of relationship, Issues of relationship, Purpose of relationship marketing, Approach towards marketing: A paradigm shift, Historical Perspectives, CRM Definitions, Emergence of CRM practice, CRM cycle, Significance of CRM, CRM Strategy, Customer Life Time Value, Relationship Life Cycle.

Unit – II
Building Customer Relationship Management: Requisites for Effective Customer acquisition, Customer Knowledge Management for Effective CRM, Customer Retention Process, Strategies to Prevent Defection and Recover Lapsed Customers , CRM Implementation: CRM framework for Implementation, Implementing CRM process, Integration of CRM with ERP System, Barriers to effective CRM Gartner‘s Competency model of CRM.

Unit – III
Functional Components of CRM: Database Management: Database Construction, Data Warehousing, architecture, Data Mining. Characteristics, Data Mining tools and techniques, Meaning, Significance, Advantages, Call Center, Multimedia Contact Center, Important CRM software‘s

Unit – IV
Sales Force Automations (SFA): Definition and need of Sales Force Automation, barriers to successful Sales Force Automation functionality, technological aspect of Sales Force Automation, data synchronization, flexibility and performance, reporting tools, Impact of CRM on Marketing Channels: Meaning, how does the traditional distrib tion channel structure, support customer relationship, emerging channel trends that impact CRM

Unit – V
Trends and Issues in CRM: CRM in e- business (B2B & B2C), Measuring the Effectiveness of CRM, Factors Influencing the future of CRM. E-CRM in Business, CRM: A changing Perspective, Features of e-CRM, Advantages of e-CRM,

Recommended Books
Text Books:

1. Alok Kumar, Chabbi Sinha & Rakesh Kumar, Customer Relationship Management: Concepts & Application Biztantra, Delhi, 2007

2. H Peeru Mohamed, A Sagadevan, Customer Relationship Management- A Step-by-Step Approach, Vikas Publishing House Pvt. Ltd., Delhi, 2008

Suggested Readings:

1. Jill Dyche: The CRM Handbook: A Business Guide to Customer Relationship Management, Pearson Education, 2002.

2. Ed Peelen, Customer Relationship Management,, Pearson Education,2005.
3. Barnes James G: Secrets of Customer Relationship Management, McGraw Hill, 2001.

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	STRATEGIC MARKETING MANAGEMENT	100	4	0	0	3

Course Objective:

To understand the various components of Business environment and to device strategies to face global competition.

Unit – I
Introduction to Strategic Marketing Management: Strategic marketing process. Concept of strategic marketing. Levels of Strategies-Corporate, Business and Operational level.
Strategy Formulation – Vision, Mission, Objectives and Goals of business and their relationship with Strategic Marketing Management. Considerations for formulation of marketing strategies for all components of Product, Price, Promotion and Distribution.

Unit – II
Corporate restructuring and strategy evaluation: Introduction to corporate restructuring, need for corporate restructuring and its forms. Evaluation of strategic alternatives, types of strategic alternatives like portfolio analysis and its techniques.
Model as basic foundation of Strategic Marketing - McKinsey‘s 7s framework for analyzing and improving organizational effectiveness.

Unit – III
Marketing Strategy Implementation – Integration of Marketing Strategies and their application to different business sectors – FMCG, Industrial, & Services. Constraints in marketing strategy implementation.

Unit – IV
Marketing Strategy Evaluation: Marketing Audits & their scope – Measurement of Marketing Performance and its feedback to next year‘s Marketing strategy formulation. Economic losses due to disasters-Issues and Strategies for preventing disasters and preparedness measures.

Unit – V
Recent trends in strategic marketing management - Eco-friendly strategies. Growing need of public private partnership. Corporate Social Responsibility (CSR), strategies of linking CSR with profit and sustainability.

Recommended Books

Text Books:

1. Thompson/Strickland, Strategic Management : Concepts and Cases, McGrawHill Companies; 11th edition
2. David Hunger and Thomas L. Wheelen "Strategic Management" AddisonWesley; 6 Sub edition.

Suggested Reading

1. William F. Glueck, Business Policy and Strategic Management, McGraw-Hill
2. Azhar Kazmi, Strategic Management and Business Policy, Third Edition
3. John A. Pearce & R.B. Robinson, Strategic Management - Strategy Formulation and Implementation, AIBT Publishers & Distributors, New Delhi, 13th Ed. 2001.

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	DIGITAL AND SOCIAL MEDIA MARKETING	**100**	**4**	**0**	**0**	**3**

Course Objective:

Digital marketing channels that can helps the students to understand the increased business visibility and brand awareness. Moreover, having a professional presence on social media helps them to reach a broader target audience to secure more leads and convert them into loyal customers.

Unit – I

Understanding Digital Marketing: Concept, Components of Digital Marketing, Need and Scope of Digital Marketing, Benefits of Digital Marketing, Digital Marketing Platforms and Strategies, Comparison of Marketing and Digital Marketing, Digital Marketing Trends.

Unit – II

Channels of Digital Marketing: Digital Marketing, Website Marketing, Search Engine Marketing, Online Advertising, Email Marketing, Blog Marketing, Social Media Marketing, Audio, Video and Interactive Marketing, Online Public Relations, Mobile Marketing, Migrating from Traditional Channels to Digital Channels. Marketing in the Digital Era Segmentation – Importance of Audience Segmentation, How different segments use Digital Media – Organizational Characteristics, Purchasing Characteristics, Using Digital Media to Reach, Acquisition and Retention of new customers, Digital Media for Customer Loyalty.

Unit – III

Digital Marketing Plan: Need of a Digital Marketing Plan, Elements of a Digital Marketing Plan – Marketing Plan, Executive Summary, Mission, Situational Analysis, Opportunities and Issues, Goals and Objectives, Marketing Strategy, Action Plan, Budget, Writing the Marketing Plan and Implementing the Plan.

Unit – IV

Search Engine Marketing and Online Advertising Importance of SEM, understanding Web Search – keywords, HTML tags, Inbound Links, Online Advertising vs. Traditional Advertising, Payment Methods of Online Advertising – CPM (Cost-per-Thousand) and CPC (Cost per-click), Display Ads - choosing a Display Ad Format, Landing Page and its importance.

Unit – V

Social Media Marketing: Understanding Social Media, Social Networking with Facebook, LinkedIn, Blogging as a social medium, Microblogging with Twitter, Social Sharing with YouTube, Social Media for Customer Reach, Acquisition and Retention. Measurement of Digital Media: Analyzing Digital Media Performance, Analyzing Website Performance, Analyzing Advertising Performance.

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MBA - Regular (IV Sem)
Marketing – Electives

	SERVICES MARKETING	100	4	0	0	3

Objectives:

- To explain why there is a need for special services marketing discipline; the challenges for services marketing; and how to deal with them.

- To acquaint the students with elements of services marketing mix, ways to manage the service delivery process and strategies to effectively implement Services marketing.

Unit – I

Introduction to Services Marketing: Understanding Services, Differences in Goods versus Services, Emerging Service Environment, Classification of Services. Service Market Segmentation, Targeting & Positioning: Process of market segmentation, customer loyalty Segmentation, Targeting and Positioning service value addition to the service product, planning and branding service products, new service development.

Unit – II

Pricing strategies for services: Service pricing, establishing monetary pricing objectives foundations of pricing objectives, pricing and demand, putting service pricing strategies into practice.

Service promotion: The role of marketing communication. Implication for communication strategies, setting communication objectives, marketing communication mix.

Unit – III

Implementing Services Marketing: Improving Service Quality and Productivity, SERVQUAL, Service Failures and Recovery Strategies. Customer Relationship Marketing:
Relationship Marketing, the nature of service consumption understanding customer needs and expectations, Strategic responses to the intangibility of service performances.

Unit – IV

Managing Service Delivery Process: Managing Physical Evidence of Services, Designing and Managing Service Processes, Managing People for Service Advantage.

Unit – V

Marketing of Services in Sectors: Financial Services, Health Service, Hospitality Services including travel, hotels and tourism, Professional Service, Public Utility Services, Educational Services.

Recommended Books

Text Books:

1. Valarie A. Zeithaml & Mary Jo Bitner - Services Marketing: Integrating Customer Focus Across The Firm, Third Edition, 2004; Tata McGraw-Hill Publishing Company Ltd, 2008.
2. Christopher H. Lovelock, Jochen Wirtz, Jayanta Chatterjee, Services Marketing: People, Technology, Strategy (A South Asian Perspective) Fifth Edition 2011; Pearson Education

Suggested Readings:

1. Cengiz Haksever, Barry Render, Roberta S. Russel, and Robert G. Murdic: Service Management and Operations (Second Edition); Pearson Education (Singapore) Pte., Ltd., 2003.
2. Kenneth E. Clow & David L. Kurtz: Services Marketing, Biztantra Publication, 2003.
3. Nimit Chowdhary & Monika Chowdhary, Textbook of Marketing of ServicesThe

Indian Experience, Macmillan India Ltd., 2005

	PROMOTIONAL & DISTRIBUTION MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Course Objective:
To provide an understanding about the relevance of marketing communication, promotion activities and management of distribution networks.

Unit – I
Marketing Communications: The nature of marketing communications. The integration of marketing communication. Integrated marketing communication planning process. Model of marketing communications decision process. Establishing objectives and budgeting for the promotional programme.

Unit – II
Developing Integrated Marketing Communications: Creative strategy development. Process of execution of creative strategy: Appeals, execution styles and creative tactics. Media planning & Strategy: Developing Media Plans & Strategies and Implementation with IMC perspective.

Unit – III
Personal Selling: Role of personal selling in IMC programme. Integration of personal selling with other promotional tools. Personal selling process and approaches. Evaluating, motivating and controlling sales force effort.

Unit – IV
Sales Promotion and Support media: Sales Promotion - objectives, consumer and trade oriented sales promotion. Developing and operating sales promotion for consumers & trade: Sales promotion tools: off - shelf offers, price promotions, premium promotions, prize promotions. Coordinating Sales promotions and advertisement. Support media – Elements of Support media and their role. Direct marketing, the internet & Interactive Marketing, publicity and public relations. Monitoring, evaluating & controlling promotion programme.

Unit – V

Distribution Management: Role and functions of channels of distribution. Distribution Systems. Distribution cost, control and customer service. Channel design, and selection of channels, selecting suitable channel partners. Motivation and control of channel members. Distribution of Services, market logistics & supply chain management.

Suggested Readings:

1. Shimp –Advertising and Promotion‖, 2007, Cengage Learning.
2. George E Belch, Micheal A Belch & Keyoor Purani ―Advertising and Promotion‖, 2010, Tata McGraw Hills, 7th Ed.
3. Shah & D‘souza –Advertising & Promotion‖, 2010, Tata McGraw Hills.

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	GREEN MARKETING	100	4	0	0	3

Course Objectives:

To make the student understand the concept of Green Marketing and Green Products

Unit – I

Green Marketing and Green Product : Introduction to green marketing-strategic green planning-environment and consumption- Green Product- Green Behavior- Five shades of green consumers Segmenting consumers- Green consumer‘s motives-Buying strategies -Green Business Opportunities- Designing green products-eco-design to eco- innovation-Fundamentals of green marketing-Establishing Credibility-Green distribution and Packaging Contemporary Government polices and subsidies that aids green product development

Unit – II

Green Marketing Concepts: Green Spinning – Green Selling – Green Harvesting – Enviropreneur Marketing - Compliance Marketing – Green Washing – Climate Performance Leadership Index

Unit – III

Purchase Decision: Meaning of Purchase decision – Factors affecting Purchase decision - Steps in the decision making process - Five stages of consumer buying decision process - Models of buyer decision-making

Unit – IV

Environmental consciousness: Introduction of Environment - Importance of environmentalism - Environmental movement - Benefits of green environment to the society - E-waste exchange - Extended Producer Responsibility Plan - Guidelines for Collection and Storage of E-Waste - Guidelines for Transportation of E-Waste - Guidelines for Environmentally Sound Recycling of E-Waste

Unit – V

Green Marketing Initiatives: Green Firms – HCL‘s Green Management Policy – IBM‘s Green Solutions – IndusInd Bank‘s Solar Powered ATMs – ITCs Paperkraft – Maruti‘s Green Supply Chain – ONCGs Mokshada Green Crematorium – Reva‘s Electric Car – Samsung‘s Eco-friendly handsets- Wipro Infotech‘s Eco-friendly computer peripherals

Text Books And Reference Books:

1. Green Marketing and Environmental Responsibility in Modern Corporations, Esakki and Thangasamy, IGI Global, 2017

2. Green Marketing Management, Robert Dahlstrom, Cengage Learning, 2010.

Essential Reading / Recommended Reading

1. Green Marketing: Challenges and Opportunities for the New Marketing Age, Jacquelyn A. Ottman, NTC Business Books, 1993

2. The New Rules of Green Marketing, Jacquelyn A. Ottman,Berrett-Koehler Publishers, 2011.

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	ADVERTISING AND BRAND MANAGEMENT	100	4	0	0	3

Course Objective:

Expose the students to the dynamism of advertising and brand management and equip them to be able to manage the advertising and branding activities in the business scenario.

Unit – I

Advertising: Its importance and nature; Communication model; Persuasion Process –perception, learning and attitude change; Major advertising decisions and influencing factors;
Determining advertising Objectives and budget.

Unit – II
Developing Advertising Campaign: Determining advertising message and copy - Headline, body copy, logo, illustration and layout; Creative styles and advertising appeals; Media planning – media selection and scheduling Advertising through Internet.

Unit – III

Organisation and Evaluation of Advertising Efforts: In-house arrangements; Using advertising agencies – selection, compensation and appraisal of advertising agency; Evaluating Advertising Effectiveness. Importance of branding; Basic Branding concepts –
Brand personality, brand image, brand identify, brand equity and brand loyalty; Product vs. Corporate branding: Major branding decisions.

Unit – IV

Identifying and selecting brand name Building brand personality, image and identity; Brand positioning and re-launch; Brand extension; Brand portfolio; communication for branding Enhancing brand image through sponsorship and even management.

Unit – V

Managing Brand Equity and Loyalty: Brand Building in Different Sectors - Customers, industrial, retail and service brands. Building brands through Internet. Developing International Brands: Pre-requisites and process; Country-of-origin effects and global branding; Building Indian brands for global markets.

Suggested Readings:

1. S.H.H Kazmi and SatishK.Batra : Advertising and sales promotion, Excel books
   Cowley. D: Understanding Brands, ,Kogan Page Ltd

2. George E.Belch& Michael A. Balch : Advertising and Promotion, TMH

3. Aaker, Myers &Batra : Advertising Management , Prentice Hall.

4. Wells,Moriarity&Burnett : Advertising Principles & practices , Prentice Hall.

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	GLOBAL MARKETING MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Course Objective:

To enhance the concepts among the students about free trade at global level and attempt to bring all the countries together for the purpose of trading.

To increase the conception of globalization by integrating the economies of different countries, enabling them to understanding the world peace by building trade relations among different nations.

Unit – I

Global Marketing: Scope and Significance of Global Marketing, The importance of global / international marketing, Differences between international and domestic marketing International environment, International Social & culture Environment, the political legal environment and regulatory environment of international marketing. Technological Environment.

Unit – II

Global Market Entry Strategies: Indirect Exporting, Domestic Purchasing, Direct Exporting, Foreign Manufacturing Strategies without Direct Investment, Foreign Manufacturing Strategies with Direct Investment. Entry Strategies of Indian Firms.

Unit – III

Global product management: International product positioning, Product saturation Levels in global Market, International product life cycle, Geographic Expansion–Strategic Alternatives. New products in Intentional Marketing, Product and culture, brands in International Market.

Unit – IV

International Marketing Channels: channels –Distribution Structures, Distribution Patterns, Factors effecting Choice of Channels, the Challenges in Managing an international Distribution Strategy Selecting Foreign Country Market intermediaries. The management of physical distribution of goods, Advertising and Branding, Grey Market goods.

Unit – V

Export Marketing: Introduction to Export Marketing, Export Policy Decisions of a firm, EXIM policy of India. Export costing and pricing, Export procedures and export documentation. Export assistance and incentives in India.

Suggested Readings :

1. Varshney and Bhattacharya:International Marketing management.
2. Philip Kotler:Marketing Management
3. John Fayerwearther:International Marketing
4..David Carson: International Marketing

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III SEMESTER ELECTIVES
SYSTEMS

	Data Mining for Business Decisions	**100**	**4**	**0**	**0**	**3**

Course Objective: A student will be able to apply Data mining techniques for quicker and better decisions. Whenever there is a need for data mining helps.

Unit I:

Introduction to Data Mining: Introduction-- Scope of Data Mining-- What is Data Mining-- How does Data Mining Works-- Predictive Modeling-- Data Mining and Data Warehousing-- Architecture for Data Mining: Profitable Applications-- Data Mining Tools:

Unit II:

Business Intelligence: Introduction, Business Intelligence-- Business Intelligence tools-- Business Intelligence Infrastructure-- Business Intelligence Applications-- BI versus Data Warehouse--BI versus Data Mining-- Future of BI. Data Preprocessing: Introduction-- Data Preprocessing Overview-- Data Cleaning-- Data Integration and Transformation-- Data Reduction-- Discretization and Concept Hierarchy Generation.

Unit III:

Data Mining Techniques An Overview: Introduction-- Data Mining-- Data Mining Versus Database Management System-- Data Mining Techniques- Association rules—Classification—Regression—Clustering-- Neural networks. Clustering—Introduction—Clustering-- Cluster Analysis-- Clustering Methods- K means-- Hierarchical clustering-- Agglomerative clustering-- Divisive clustering-- clustering and segmentation software-- evaluating clusters.

Unit IV:

Web Mining—Introduction—Terminologies-- Categories of Web Mining – Web Content Mining-- Web Structure Mining-- Web Usage Mining-- Applications of Web Mining and Agent based and Data base approaches-- Web mining Software.

Unit V:

Applications of Data mining: Introduction-- Business Applications Using Data Mining-- Risk management and targeted marketing-- Customer profiles and feature construction-- Medical applications (diabetic screening)-- Scientific Applications using Data Mining-- Other Applications.

References:

1. **Introduction to data mining** by Tan, Steinbach & Kumar.
2. Data Mining: Concepts and Techniques, Third Edition by Han, Kamber & Pei.
3. Data Mining and Analysis Fundamental Concepts and Algorithms by Zaki & Meira.
4. **Data Mining: The Textbook** by Aggarwal.
5. Data Mining for Business Intelligence by Galit Shmueli,Nitin R.Patel,PeterC.Bruce

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	Managing Software Projects	**100**	**4**	**0**	**0**	**3**

OBJECTIVES:

- To study how to plan and manage projects at each stage of the software development life cycle (SDLC)
- To train software project managers and other individuals involved in software project planning and tracking and oversight in the implementation of the software project management process.
- To understand successful software projects that support organization's strategic goals

UNIT -I: Introduction

Project, Management, Software Project Management activities, Challenges in software projects, Stakeholders, Objectives & goals

Project Planning: Step-wise planning, Project Scope, Project Products & deliverables, Project activities, Effort estimation, Infrastructure

UNIT -II: Project Approach

Lifecycle models, Choosing Technology, Prototyping

Iterative & incremental Process Framework: Lifecycle phases, Process Artifacts, Process workflows (Book 2)

UNIT -III: Effort estimation & activity Planning

Estimation techniques, Function Point analysis, SLOC, COCOMO, Use case-based estimation , Activity Identification Approaches, Network planning models, Critical path analysis

UNIT -IV: Risk Management

Risk categories, Identification, Assessment, Planning and management, PERT technique, Monte Carlo approach

UNIT -V: Project Monitoring & Control, Resource Allocation

Creating a framework for monitoring & control, Progress monitoring, Cost monitoring, Earned value Analysis, Defects Tracking, Issues Tracking, Status reports, Types of Resources, Identifying resource requirements, Resource scheduling, Planning Quality, Defining Quality - ISO 9016, Quality Measures, Quantitative Quality Management Planning, Product Quality & Process Quality Metrics, Statistical Process Control Capability Maturity Model

OUTCOMES:

- To match organizational needs to the most effective software development model
- To understand the basic concepts and issues of software project management
- To effectively Planning the software projects
- To implement the project plans through managing people, communications and change
- To select and employ mechanisms for tracking the software projects
- To conduct activities necessary to successfully complete and close the Software projects
- To develop the skills for tracking and controlling software deliverables
- To create project plans that address real-world management challenges

TEXT BOOKS:

1. Software Project Management, Bob Hughes & Mike Cotterell, TATA Mcgraw-Hill
2. Software Project Management, Walker Royce: Pearson Education, 2005.
3. Software Project Management in practice, Pankaj Jalote, Pearson.

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	WEB DESINING	**100**	**4**	**0**	**0**	**3**

UNIT-I:
Web Fundamentals – Introduction To The Web, History of the Web, Protocols Governing the Web, Creating Websites for Individuals and the Corporate World, Web Applications, Writing Web Projects, Identification of Objects, Target User, Web Team, Planning and Process Development, Web Architecture, Major Issues in the Web Solutions Development, Web Servers (Apache Web Server), Web Browsers, Internet Standards, TCP/IP Protocol Suite, IP Addresses, MIME, Cyber Laws.

UNIT-II:
Hyper Text Transfer Protocol (HTTP): Introduction - Web Server and Clients, Resources, URL and its Anatomy – Examples, Message Format, Persistent and Non-Persistent Connections, Web Caching, Proxy. Java Network Programming- Java and the Net, Java Networking Classes and Interfaces, Looking up Internet Address, Client/Server Programs, Socket Programming, E-mail Client.(lab sessions to be conducted)

UNIT-III:
Hyper Text Markup Language (HTML): Introduction, Structure, Text, Lists, Links, Images, Tables, Forms, Frames, Images, and Meta Tags. (lab sessions to be conducted)

UNIT-IV:
Cascading Style Sheets (CSS) Introduction, Advantages, Color, Text, Boxes, Lists, Tables and Forms, Layout, Images, HTML5 Layout. (Lab Sessions to be conducted)

UNIT-V:
JavaScript Introduction, Variables, Literals, Operators, Control Structure, Conditional Statements, Arrays, Functions, Objects, JavaScript and HTML DOM, Advanced JavaScript and HTML Forms (Lab sessions to be conducted).

(Lab Sessions to be conducted wherever it is required)
Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References :
Uttam K Roy: ―Web Technologies‖ — Oxford University Press, 2010.
Jon Duckett: ―HTML & CSS: Design and Build Websites‖ – John Wiley & Sons, 2014.

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	BUSINESS ANALYTICS	100	4	0	0	3

Course Objective: The course is designed to gain an understanding of how managers use business analytics to formulate and solve business problems and to support managerial decision making. The course familiarizes the students with the processes needed to develop, report, and analyze business data.

Unit I

Introduction to Business Analytics: Evolution of Business analytics, scope, Data for Business Analytics, Models in Business Analytics, problem solving with business analytics- Types of data, Integrating Analytics with business, Business Analytics for Competitive Advantage, Descriptive, Predictive, and Prescriptive Analytics, Dashboards Business Analytics Process Cycle.

Unit II

Analytics on Spreadsheets: Basic Excel, Excel Formulas, Excel Functions, Data Queries. Descriptive Analytics: Descriptive Statistical measures - Populations and samples, Statistical notations, Measures of Location, Measures of Dispersion, and Measures of Association. Statistical Inference: Hypothesis testing, one-Sample Test, Two-Sample Test, Two tailed Hypothesis for mean, ANOVA. Predictive Analytics: Simple Linear regression, Multiple Linear regression, Residual Analysis, Building regression models, Regression with categorical Independant variables – CASE STUDIES.

Unit III

Machine Learning, Supervised Learning and Unsupervised Learning, Clustering & Segmentation, Affinity/ Association Analysis, Data Reduction, Visual Analytics and Data Visualization Prescriptive Analytics: Building Linear Optimization models, Implementing Linear Optimization models on spreadsheets, Solving Linear Optimization models- CASE STUDIES.

Unit IV

Marketing Analytics, Models and metrics- Market Insight – Market data sources, sizing, PESTLE trend analysis, and porter five forces analysis - Market basket Analysis, Text Analytics, Spreadsheet Modelling - Sales Analytics: E Commerce sales mode, sales metrics, profitability metrics and support metrics.

Unit V

Introduction to Big Data, Master Data Management. Data Mining on what kind of data, What kinds of patterns can be mined, Which technologies are used, Which kinds of applications are targeted, Major issues in Data Mining. Getting to know your Data: Data Objects and Attribute Types, Basic Statistical Descriptions of Data, Data Visualization, Measuring data Similarity and Dissimilarity.

References:

1. Analytics at Work by Thomas H. Davenport, Jeanne G.Harris and Robert Morison, Harvard Business Press, 2010.
2. Getting Started with Business Analytics: Insightful Decision – Making by David Hardoon, Galit Shmueli, Chapman & Hall/CRC, 2013.
3. Business Intelligence: A Managerial Approach by Efraim Turban, Ramesh Sharda, Dursun Delen and Daid King, Pearson Publication, 2012.
4. Business Intelligence Making Decision through Data Analytics, Jerzy Surma, Business Expert Press, 2011.
5. Successful Business Intelligence: Secrets to Making BI a Killer App by Cindi Howson, Tata McGraw Hill Edition 2012.
6. R for Everyone: Advanced Analytics and Graphics, Jared Lander, Addison Wesley.

	Managing Digital Innovation and Transformation	**100**	**4**	**0**	**0**	**3**

Course Objectives

- To understand digital transformations and information in the globalization world
- To explore social media transformation in the business world
- To develop on building digital capabilities
- To understand the challenges on using digital platform for business
- To learn digital transformations in the space of cloud computing

UNIT -I : Introduction to Digital Transformations: The five domains of digital transformations — customer, competition, data, innovation, and value, 1-farness customer networks, turn data into assets, adapt value proposition

UNIT-II : Classification of Digital Transformations: Business Model, product development, data, processes, knowledge, self—service, and organizational culture; Social Media Transformation: understand requirements, document goals, objective and social media tactics, establish potential future state operating model, gap analysis and recommendations.

UNIT-III : Building digital capabilities: challenges ongoing digital, handling employee during digital transformations, developing companywide strategy; Digital transformations in the space of cloud computing: prepare and drive digital transformations.

UNIT –IV: Re-Organisation in Order to Bridge the Gap to Digital Customers - Digitalization of Professional Services: Value Creation in Virtual Law Firms - Digital Transformation Supporting Public Service Innovation: Business Model Challenges and Sustainable - Development Opportunities

UNIT – V

Areas of IT management and its challenges, IT services, IT organisation - Enterprise Innovation and the Digital Transformation - Industry, development trends, business competitiveness due to Technology - Using Technology as Innovation, Integration and Interconnection of business - IT strategy, IT governance, IT sourcing and controlling

References:

- Herbert, Lindsay; Digital Transformation: Build your organization's Future for the Innovation Age, Bloomsbury Publication, 2017
- Venkatraman, V; The Digital Matrix: New rules for business transformation through technology; Lifetree Media Ltd, 2017
- Velte, A. T; Velte, T. J; and Elsenpeter, R; Cloud Computing: A Practical Approach, Mcgraw Hill Education (India) Private Limited,2017 (23rd reprint)
- Rogers, David, The Digital Transformation Playbook — Rethink your Business for the Digital Age (Columbia Business School Publishing),2016.
- Westerman, G; Bonnet, D; and McAfee, A; Leading Digital: Turning Technology into Business Transformation; Harvard Business Review Press, 2014.
- Srinivasan. J, and Suresh. J, Cloud Computing: A Practical Approach for learning and implementation, Pearson Publication, 2014

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IV SEMESTER ELECTIVES
SYSTEMS

	BIG DATA ANALYTICS	100	4	0	0	3

COURSE OBJECTIVES : Understand the Big Data Platform and its Use cases • Provide an overview of Apache Hadoop • Provide HDFS Concepts and Interfacing with HDFS • Understand Map Reduce Jobs • Provide hands on Hodoop Eco System • Apply analytics on Structured, Unstructured Data. • Exposure to Data Analytics with R.

Unit I

Introduction to Big Data: Big Data-definition, Characteristics of Big Data (Volume, Variety,Velocity, Veracity, Validity), Importance of Big Data , Patterns for Big Data Development, Data in the Warehouse and Data in Hadoop [Zikopoulos] - Introduction to Hadoop**:** Hadoop- definition, Understanding distributed systems and Hadoop,Comparing SQL databases and Hadoop, Understanding MapReduce, Counting words with Hadoop—running your first program, History of Hadoop, Starting Hadoop - The building blocks of Hadoop, NameNode, DataNode, Secondary NameNode, JobTracker and Task Tracker.

Unir II

HDFS: Components of Hadoop -Working with files in HDFS, Anatomy of a MapReduceprogram, Reading and writing the Hadoop Distributed File system -The Design of HDFS, HDFS Concepts, The Command-Line Interface, Hadoop Filesystem, The Java Interface, Data Flow, Parallel Copying with distcp, Hadoop Archives. Hadoop I/O: Compression—Serialization-- Avro and File-Based Data structures.

Unit III

MapReduce Programming: Writing basic Map Reduce programs - Getting the patent data set,constructing the basic template of a Map Reduce program, Counting things, Adapting for Hadoop's API changes, Streaming in Hadoop. MapReduce Advanced Programming: Advanced MapReduce - Chaining Map Reduce jobs,joining data from different sources.

Unit IV

Hadoop Eco System --User Defined Functions-- Data Processing operators. Hive : Hive Shell-- Hive Services-- Hive Metastore-- Comparison with Traditional Databases—HiveQL-- Tables, Querying Data and User Defined Functions. Hbase : HBasics—Concepts—Clients—Example-- Hbase Versus RDBMS. Big SQL : Introduction

Unit V

Graph Representation in MapReduce: Modeling data and solving problems with graphs,Shortest Path Algorithm, Friends-of-Friends Algorithm, PageRank Algorithm, BloomFilters. Data Analytics with R Machine Learning : Introduction, Supervised Learning, Unsupervised Learning, Collaborative Filtering. Big Data Analytics with BigR.

References

1. Tom White ― Hadoop: The Definitive Guide‖ Third Edit on, O'reily Media, 2012.
2. Seema Acharya, Subhasini Chellappan, "Big Data Analytics" Wiley 2015.
3. Michael Berthold, David J. Hand, "Intelligent Data Analysis‖, Springer, 2007.
4. Jay Liebowitz, ―Big Data and Business Analytics‖ Auerbach Publications, CRC press (2013)
5. Tom Plunkett, Mark Hornick, ―Using R to Unlock the Value of Big Data: Big Data Analytics with Oracle R Enterprise and Oracle R Connector for Hadoop‖, McGraw-Hill/Osborne Media (2013), Oracle press.
6. Anand Rajaraman and Jef rey David Ulman, ‒Mining of Massive Datasets‖, Cambridge University Press, 2012.
7. Bill Franks, ‒Taming the Big Data Tidal Wave: Finding Opportunities in Huge Data Streams with Advanced Analytics‖, John Wiley & sons, 2012.
8. Glen J. Myat, ‒Making Sense of Data‖, John Wiley & Sons, 2007
9. Pete Warden, ―Big Data Glossary‖, O'Reily, 2011.
10. Michael Mineli, Michele Chambers, Ambiga Dhiraj, "Big Data, Big Analytics: Emerging

Business Intelligence and Analytic Trends for Today's Businesses", Wiley Publications, 2013.

11. ArvindSathi, ―BigDataAnalytics: Disruptive Technologies for Changing the Game‖, MC Press, 2012
12. Paul Zikopoulos ,Dirk DeRoos , Krishnan Parasuraman , Thomas Deutsch , James Giles , David Corigan , "Harness the Power of Big Data The IBM Big Data Platform ", Tata McGraw Hill Publications, 2012.

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VIZIANAGARAM 535 003 Andhra Pradesh (India)

	ENTERPRISE RESOURCE PLANNING	100	4	0	0	3

Course Objectives:

COB 1: To help in understanding basic concepts in ERP.
COB 2: To help in understanding the importance of ERP.
COB 3: To help in analyzing the effects of ERP on business.

Course Outcomes:
At the end of this course students will be able to:

CO 1: Describe the meaning of ERP.
CO 2: Explain the importance of ERP Implementation.
CO 3: Distinguish Pre ERP implementation and post ERP implementation.
CO 4: Compare ERP System Options and Selection Methods.
CO 5: Research on ERP present and future.

UNIT- I:
Introduction to ERP: Overview of ERP – Introduction and Evaluation –advanced ERP-SCM and CRM systems and related technologies – ERP life cycle ERP implementation Life cycle- SDLC and ERP life cycle.

UNIT-II:
ERP Implementation: reasons for ERP failure. pre – implementation Tasks – Implementation methodologies – Process definition - Dealing with employee resistance Training and Education – Project management and monitoring Success and failure factors of an ERP implementation.

UNIT-III:
Post ERP implementation: Change Management – post implementation review, support, maintenance and security of ERP. Different business modules of an ERP package. ERP market place and market place dynamics.

UNIT-IV:
ERP System Options and Selection Methods: Optimal Means of Developing an ERP, Measurement of Project Impact, IT Selection and Project Approval, ERP proposal Evaluation, Project Evaluation Techniques, Testing.

UNIT--V:
ERP present and future: Turbo charge the ERP system- EAI – ERP. Internet and WWW- Future Directions and trends in ERP – Future Directions in ERP: New Markets, New Technologies, Faster Implementation Methodologies, New Business Segments, Trends in Security.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

References:

1. Singla: ―Enterprise Resource Planning‖, Cengage Learning, New Delhi, 2013.
2. Alexleon: ―Enterprise Resource Planning‖, TMH, New Delhi, 2011.
3. Mahadeo Jaiswal, Ganesh Vanapalli: ―Enterprise Resource Planning‖, MacMillon, New Delhi, 2013.
4. N.Venkateswaran: ―Enterprise Resource Planning‖, SCITECH Publiscation, New Delhi, 2009.
5. S.Kesharwani, SBodduluri, M Ashok Kumar: ―Enterprise Resource Planning‖, Paramount Publishing House, New Delhi, 2012.

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	CYBER LAWS & SECURITY	100	4	0	0	3

Course Objectives:

COB 1: To help in understanding basic concepts in cyber security.
COB 2: To help in understanding the importance of Secure System Planning and Administration
COB 3: To help in analysing the effects of Secure System Planning and administration.

Course Outcomes:
At the end of this course students will be able to:

CO 1: Describe the meaning and concepts of cyber security.
CO 2: Explain the importance of Secure System Planning and administration.
CO 3: Distinguish Information security policies and procedures in organizations.
CO 4: Compare and contrast the practical applications of Information security systems.
CO 5: Research on Organizational and Human Security.

UNIT-I:
Introduction to Computer Security: Definition, Threats to security, Government requirements, Information Protection and Access Controls, Computer security efforts, Standards, Computer Security mandates and legislation, Privacy considerations, International security activity.

UNIT-II:
Secure System Planning and administration: Introduction to the orange book, Security policy requirements, accountability, assurance and documentation requirements, Network Security, The Red book and Government network evaluations.

UNIT-III:
Information security policies and procedures: Corporate policies- Tier 1, Tier 2 and Tier3 policies - process management-planning and preparation-developing policies-asset classification policy-developing standards.

UNIT-IV:
Information security: fundamentals-Employee responsibilities- information classification Information handling- Tools of information security- Information processing-secure program administration.

UNIT-V:
Organizational and Human Security: Adoption of Information Security Management Standards, Human Factors in Security- Role of information security professionals.

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

Reference Books:

1. Debby Russell and Sr. G.T Gangemi, "Computer Security Basics (Paperback)‖, 2nd Edition, O‘ Reilly Media, 2006.
2. Thomas R. Peltier, –Information Security policies and procedures: A Practitioner‘s Reference‖, 2nd Edition Prentice Hall, 2004.
3. Kenneth J. Knapp, –Cyber Security and Global Information Assurance: Threat Analysis

and Response Solutions‖, IGI Global, 2009.
4. Thomas R Peltier, Justin Peltier and John blackley, ‖Information

Security Fundamentals‖, 2nd Edition, Prentice Hall, 1996.
5. Jonathan Rosenoer, ―Cyber law: the Law of the Internet‖, Springer-verlag, 1997.

	INFORMATION SYSTEMS AUDIT	100	4	0	0	3

Course Objectives:

COB 1: To help in understanding basic concepts in Information Systems Audit.
COB 2: To help in understanding the importance of Information and systems audit.
COB 3: To help in analyzing the effects of Information Systems and Audit.

Course Outcomes:
At the end of this course students will be able to:

CO 1: Describe the meaning and concepts of Information System Auditing.
CO 2: Explain the importance of Management Control Framework.
CO 3: Distinguish Management Control Framework required for establishing effective controls.
CO 4: Compare and contrast Evidence Evaluation systems.
CO 5: Research corporate governance issues in Indian context.

UNIT-I:
Overview of Information System Auditing: Effect of Computers on Internal Controls, Effects of Computers on Auditing, Foundations of information Systems Auditing, Conducting an Information Systems Audit.

UNIT-II:
The Management Control Framework-I: Introduction, Evaluation the Planning Function, Leading Function and Controlling Function, Systems Development - Management Controls, Approaches to Auditing Systems Development , Normative Models of the Systems Development Process, Evaluating the Major phases in the Systems Development Process, Programming Management Controls, Data Resource Management Controls.

UNIT-III:
The Management Control Framework-II: Security Management Controls, Operations Management Controls Quality Assurance Management Controls- Case Studies.

UNIT-IV:
Evidence Collection: Audit Software, Code Review, Test Data, and Code Comparison, Concurrent Auditing techniques, Interviews, Questionnaires, and Control Flowcharts. Performance Management tools- Case Studies.

UNIT-V:
Evidence Evaluation: Evaluating Asset Safeguarding and Data Integrity, Evaluating System Effectiveness, Evaluating System Efficiency. Information Systems Audit and Management: Managing the Information Systems Audit Function,

Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.

Reference Books:
1. Ron Weber: ―Information Systems Control and Audit‖, Pearson Education, 2013.
2. D P Dube: Information System Audit and Assurance, TMH, New Delhi, 2008.

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	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	**100**	**4**	**0**	**0**	**3**

UNIT I

What is Artificial Intelligence (AI)---Definitions, The Foundations of AI, The History of AI, Agents and Environments, The Concept of Rationality, The Nature of Environments, The Structure of Agents, Problem Solving Agents, Example Problems, Searching for Solutions, Uninformed Search Strategies: Breadth First, Depth First, Depth Limited; Informed Search Strategies: Greedy Best First, A*Algorithms

UNIT II

Convolution Neural Networks -- Image classification -- Text classification -- Image classification and hyper-parameter tuning -- Emerging NN architectures -- Recurrent Neural Networks -- Building recurrent Neural Networks-- Long Short-Term Memory -- Time Series Forecasting. - Deep Learning -- Auto-encoders and unsupervised learning -- Stacked auto-encoders and semi-supervised learning-- Regularization - Dropout and Batch normalization.

UNIT III

Foundations for Machine Learning(ML)-- ML Techniques overview -- Validation Techniques (Cross-Validations)-- Feature Reduction/Dimensionality reduction -- Principal components analysis (Eigen values, Eigen vectors, Orthogonality). - Clustering -- Distance measures -- Different clustering methods (Distance, Density, Hierarchical) -- Iterative distance-based clustering-- Dealing with continuous,--categorical values in K-Means--Constructing a hierarchical cluster-- K-Medoids-- k-Mode and density-based clustering -- Measures of quality of clustering

UNIT IV

Classification Naïve Bayes Classifier -- Model Assumptions--Probability eestimation -- Required data processing -- M-estimates-- Feature selection--Mutual information --Classifier K-Nearest Neighbors -- Computational geometry-- Voronoi Diagrams-- Delaunay Triangulations -- K-Nearest Neighbor algorithm-- Wilson editing and triangulations -- Aspects to consider while designing K-Nearest Neighbor Support Vector Machines --Linear learning machines and Kernel space--Making Kernels and working in feature space-- SVM for classification and regression problems. Decision Trees -- ID4--C4.5-- CART ---Ensembles methods -- Bagging & boosting and its impact on bias and variance -- C5.0 boosting -- Random forest -- Gradient Boosting Machines and XGBoost.

UNIT V

Association Rule mining-- The applications of Association Rule Mining: Market Basket--Recommendation Engines, etc.-- A mathematical model for association analysis-- Large item sets-- Association Rules -- Apriori-- Constructs large item sets with mini sup by iterations--Interestingness of discovered association rules-- Application examples-- Association analysis vs. classification -- FP-trees. - Machine Learning Applications across Industries---Healthcare—Retail--Financial Services—Manufacturing—Hospitality--Cloud Based ML Offerings--Top 10 AI Startups---Flashcards (Tips, Tricks, Definitions)

References:

1. Artificial Intelligence: A Modern Approach. Stuart Russell, Peter Norvig, Pearson Education 2nd Edition.
2. Expert Systems : Principles and Programming. Joseph C Giarratano, Gary D Riley Thomson Publication, 4th Edition.
1. Elaine Rich and Kevin Knight: Artificial Intelligence , Tata McGraw Hill.
2. Dan W.Patterson, Introduction to Artificial Intelligence and Expert Systems, PrenticeHall of India.
3. David W Rolston: Principles of Artificial Intelligence and Expert System Development, McGraw Hill

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	SERVICE OPERATIONS MANAGEMENT	100	4	0	0	3

UNIT-I:
Introduction – Goods Vs. Services – Definition of Services – Nature and characteristics of services – Classification of services – Services in Manufacturing Sector – The service-process matrix – Service Strategy – Competitive Service Strategies – Strategic Service Vision Globalization of Services: Service Management in the International Arena.

UNIT-II:
Service Strategy and Competitiveness: Positioning and Marketing of Services -Technology and Its Impact on Services and Their Management - Design and Development of Services and Service Delivery Systems. Service Design: Introduction – New service design and development – Design elements – Service system design and delivery process: Classification of Service Processes, Process Structure – Technology in Services – Product/Service Life Cycle on Performance Objectives.

UNIT III
Service Quality: Defining Service Quality – Measuring Service Quality: SERVQUAL – Quality Service by Design – Service process control – Quality philosophy and performance excellence – Total Quality Management (TQM) tools: Seven Quality Control (QC) tools

UNIT-IV
Service Facility: Service Facility Design – Service facility layout: Types, Process Analysis – Facility Location: Decision, Classification, Techniques - Human Resource Development for Services. - Locating Facilities and Designing their Layout. - Service Quality and Continuous Improvement.

UNIT-V:
Managing Demand And Capacity: Managing Demand and Supply in Services- Forecasting Demand – Forecasting methods: Subjective or qualitative, Quantitative – Service Capacity: Factors, Elements Strategies – Service Inventory Management - Service Productivity and Measurement of Performance. - Management of Public and Private Non-profit Service Organizations.- Forecasting for Services.

Text books:

1. B. Fitzsimmons, James A., and Mona J. Fitzsimmons, Service Management: Operations, Strategy, and Information Technology, 6th Ed., Irwin/McGraw-Hill, 2008.

References:

2. **Cengiz Haksever, Barry Render, Roberta S. Russell & Robert G. Murdick,** Service Management and Operations, Pearson – Prentice Hall.
3. C. Haksever, Render B., Russel S. R. and Murdick R. G., Service Management and Operations, 2nd Ed., Prentice Hall, 2007.
4. 2. Robert Johnston, Graham Clark. Service Operations Management: Improving Service Delivery, Prentice Hall, 2012.

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	QUALITY TOOLKIT FOR MANAGERS	100	4	0	0	3

UNIT I

Introduction: Evolution of Quality – Quality Definition and Contributions by Deming, Juran, Crosby, Feiganbaum, Ishikawa and Taguchi – Definition of quality management – Quality management Framework – Barriers or Obstacles for implementation of quality management – Cost of Quality

UNIT II

Quality Management Systems: Introduction – Benefits of ISO Registration – ISO 9000 series of Standards – ISO 9001 Requirements – Implementation – Documentation – Writing the Documents – Quality Auditing

UNIT III

Statistical Process Control: Introduction – Pareto Analysis – Cause and Effect Diagram – Checklist or Checksheet – Process Flow Chart – His gram – Scatter Diagram – Statistical Fundamentals such as Mean and Standard deviation – Chance and Assignable Causes – Control Charts for Variables – Process Capability Analysis such as C_p and C_{pk}– Control Charts for Attributes.

UNIT IV

Tools And Techniques: Plan-Do-Check-Act (PDCA) Cycle – Quality Circles – Seven Management tools – Benchmarking – Quality Function Deployment (QFD) – Failure Mode and Effect Analysis (FMEA) – Taguchi Method

UNIT V

SIX SIGMA: Evolution – TQM vs. Six Sigma – What is Six Sigma – Six Sigma methodologies Such as DMAIC, DFSS – Six Sigma Belts.

TEXT BOOKS

1. Besterfiled, et al., Total Quality Management, Pearson Education Asia, 3rd Edition, 2006.
2. Suganthi, L. and Samuel, A., Total Quality Management, Prentice Hall (India) Pvt. Ltd.

REFERENCE BOOKS

1. Evans, J.R. and Lindsay, W. M., The Management and Control of Quality, 6th Edition, South-Western (Thomson Learning), 2005.
2. Oakland, J.S., TQM – Text with Cases, Butterworth – Heinemann Ltd., Oxford, 3rd Edition, 2006.

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	Pricing and Revenue Management	**100**	**4**	**0**	**0**	**3**

UNIT I
Pricing and Revenue management: introduction, objectives, scope of pricing and revenue management – Role of Revenue Management – multiple customers management in revenue management.

UNIT II
Pricing and Revenue management in Perishable management: concept of perishable goods – pricing methods of perishable goods - identify the cost- competition and consumer components of pricing – pricing as a component of the marketing mix -

UNIT III
Revenue management in the seasonal demand: concept – objectives- methods of demand forecasting for seasonal demand – price determination under seasonal demand - management of seasonal demand flections and measures to control demand and price fluctuations.

UNIT IV
Pricing and revenue management in service industry: concept of services – type of services – objectives- role and functions of services industry – Technical matching of demand and supply – pricing strategies in hotels, flights, overseas shipping, rental cars and transportation providers - customer value based pricing - the psychological foundations of pricing - value and use of pricing in a broader sense – Dynamic pricing.

UNIT V
Revenue management for bulk and spot customers: concept of bulk customers – role of bulk customers in business promotion – pricing management and pricing strategies for bulk customers – demand and supply – pricing in long and short term contracts – pricing in bulk contracts – spot market pricing.

Reference:

1. David Walters. Operations Strategy, Palgrave Macmillan Publisher, 2015.
2. JA Van Mieghem and Gad Allon. Operations Strategy: Practices and Principles, Dynamic Ideas LLC 2nd edition, 2015.
3. Kotlar, Philip, Marketing Management, Prentice Hall, New Delhi.
4. McCarthy, E.J., Basic Marketing: A managerial approach, Irwin, New York.

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	OPERATIONS STRATEGY	**100**	**4**	**0**	**0**	**3**

UNIT I

Introduction – Strategy: Definition, Levels – Operations and Strategy – Operations Management Vs. Operations Strategy – Four perspectives on Operations Strategy – Decision areas: Structural and Infrastructural – The Process of Operations Strategy

UNIT II

Performance objectives: Introduction – Quality: Hard, Soft – Speed: Time – Dependability: Time – Flexibility: Type –Internal and external benefits – The Operations Strategy Matrix – Performance Objectives and Competitive Factors – Product/Service Life Cycle on Performance Objectives.

UNIT III

New approaches: Total Quality Management (TQM): Fit into Operations Strategy – Lean Manufacturing: Fit into Operations Strategy – Business Process Reengineering (BPR): Fit into Operations Strategy – Six Sigma: Fit into Operations Strategy.

UNIT IV

Decision areas – I: Capacity Strategy: Levels of capacity decision, Factors influencing the overall level of capacity, Location of capacity – Purchasing and Supply Strategy: Supply Networks, Do (Make) or Buy? the vertical integration decision.

UNIT V

Decision areas – II Process Technology Strategy: Classification, Three dimensions of process technology – Improvement Strategy: Breakthrough Improvement and Continuous Improvement, The Importance – Performance Matrix.

TEXT BOOKS:

1. Nigel Slack, Michael Lewis, Mohita Gangwar Sharma. Operations Strategy, Pearson Education Limited, England, 5th edition, 2018.

REFERENCE BOOKS:

1. David Walters. Operations Strategy, Palgrave Macmillan Publisher, 2015.
2. JA Van Mieghem and Gad Allon. Operations Strategy: Practices and Principles, Dynamic Ideas LLC 2nd edition, 2015.

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	SALES AND OPERATIONS PLANNING	100	4	0	0	3

Unit- I

Sales Management and Organisation: Objectives and sales management , sales executive as a coordinator , sales management and control , sales organisation - it's purpose , setting up a sales organisation , types of sales organisation – sales and operational planning: 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 -II

Personal Selling: Objectives and theories of personal selling , analysing market potential, sales potential and sales forecasting method & evaluation , determining sales related marketing policies - product policies, distribution policies & pricing policies .

Unit- III

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. Sales Operations: Sales budget , sales territories , sales Quata's , control of sales , sales meeting and sales contest, organising display , showroom and exihibitions.

Unit- IV

Salesmanship: Sales manager- Qualities and functions , types of salesman , prospecting , pre-approach & approach , selling sequence , psychology of customers. Capacity Planning – Measurement of Capacity: KPIs (Efficiency and Utilization) – Aggregate Production Planning (APP): Model, Techniques – Multi Attribute Decision Making (MADM) – Analytic Hierarchy Process

Unit-V

Sales force Management: Recruitment & selection, training , formulation & conduction of sales training programme, motivation of sales personnel , compensation of sales personnel , evaluation and supervision of sales personnel .

Reference:

1. Robert Penn Burrows, Lora Cecere, Gregory P. Hackett, The Market-Driven Supply Chain: A Revolutionary Model for Sales and Operations Planning in the New On-Demand Economy, AMACOM Div American Mgmt Assn, 2011.
2. Still , Cundiff & Govani Sales management & Cases
3. McMurry & Arnold How to build a dynamic Sales Organisation
4. Pradhan , Jakate & Mali Elements of Salesmanship and Publicity
5. Anderson R Professional Sales Management
6. F.L. Lobo Successful Selling

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	BEHAVIORAL OPERATIONS MANAGEMENT	**100**	**4**	**0**	**0**	**3**

UNIT I

Behavioural Operations Management – Definition – The study of Behavioural Operations – History and the Contemporary Knowledge Base – Virtuous Cycles of Experimental Learning

UNIT II

Production and Service Contexts – I: Synch and Swim: Managing and Mismanaging Process Constraints and Variability – Process and Perception: Kristen's Cookie Company from a Behavioral Point of View

UNIT III

Production and Service Contexts – II:The Wait or Buy Game: How to Game the System That's Designed to Game You Back – Sharing the Load: Group Behavior and Insights into Simulating Real-World Dynamics.

UNIT IV

Supply Chains: Sharing the Risk: Understanding Risk – Sharing Contracts from the Supplier's Perspective – Supply Chain Negotiator: A Game of Gains, Losses, and Equity.

UNIT V

Integrative/Enabling Technology: Dynamic Pricing in Revenue Management – Intertemporal choices in Project based organisations – Impulsiveness and Emotions – Behaviour Assessment Test on Conflict Management – Kicking the mean Habit – A chain of hands.

TEXT BOOKS:

1. Elliot Bendoly, Wout van Wezel, and Daniel G. Bachrach, The Handbook of Behavioral Operations Management, Oxford University Press, 2015.
2. Christoph H. Loch, Yaozhong Wu, Behavioral Operations Management, Now Publishers Inc, 2007.

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	THEORY OF CONSTRAINTS	100	4	0	0	3

Unit I. Introduction to Theory of Constraints

Unit II. TOC Thinking Tools: Current Reality Tree and Core Conflicts -- Conflict Clouds -- Negative Branch Reservations -- Prerequisite Tree -- Categories of Legitimate Reservation -- Layers of Resistance

Unit III. TOC applications in Production/Operations -- Concepts of Drum—Buffer-- Rope -- Simplified Drum Buffer Rope -- Drum Buffer Rope -- Use of Simulator to explain DBR

Unit IV. TOC applications in Distribution -- Replenishment Model

Unit V. TOC applications in Finance and Measurements -- Throughput Accounting

Unit VI TOC applications in Project management -- Critical Chain
References

1.Theory of Constraints by Eliyahu M Goldratt
2.Theory of Constraints Handbook by John G Schleler

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	MANAGEMENT OF MANUFACTURING SYSTEMS	**100**	**4**	**0**	**0**	**3**

UNIT I

Management of Manufacturing Systems: An Overview – Manufacturing Systems: Type – Challenges – Evolution of Manufacturing Systems – Nine laws in Manufacturing – Various methodologies.

UNIT II

Cellular Manufacturing Systems: Principle – Group Technology (GT) – Cellular Manufacturing Systems – Layout – Cell Design: formation, operator allocation, sequencing and scheduling – Part Classification and Coding – Production flow analysis.

UNIT III

Just-in-time: Evolution of Just-In-Time – Principle – Seven wastes – Just-In-Time (JIT) – Kanban or Pull System – CONWIP – Tools and Techniques.

UNIT IV

Synchronous manufacturing: Synchronous Manufacturing or Theory of Constraints – Principle – Definition of Goal by Goldratt – Role of a constraint – Types of resources: bottlenecks and capacity constrained resource – Drum Buffer Rope System.

UNIT V

Flexible Manufacturing Systems (FMS): Concept of Flexible Manufacturing System (MS) – Flexibility – Types: Single machine cell, Flexible manufacturing cell, Flexible manufacturing system – Components – Applications – Benefits – Implementation issues.

TEXT BOOKS:

1. Mikell P. Groover, Automation, Production Systems and Computer-Integrated Manufacturing, Pearson Education; Fourth edition, 2016.
2. Richard J. Schonberger, World Class Manufacturing, Free Press Publication, 2008.
3. Feld, W. M., Lean Manufacturing Tools, Techniques and How Use Them, St. Lucie Press, Florida, 2000.

REFERENCE BOOKS:

1. Richard J. Schonberger, World Class Manufacturing: The Next Decade: Building Power, Strength, and Value, Free Press Publication, 2013.
2. R.P.Mohanty & S.G.Deshmukh, Advanced operations management, Pearson education (Singapore) P.Ltd

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	SOURCING MANAGEMENT	**100**	**4**	**0**	**0**	**3**

UNIT I

Introduction of Sourcing – Sourcing management: Concept, Functions, Application – Supplier Evaluation and Selection (Concepts): Supplier Rating – Rating criteria – Factors.

UNIT II

Global sourcing: Introduction to Global Sourcing – Trends in Global Sourcing – Global Sourcing – Negotiation – Performance Measurement and Evaluation (Concepts and Metalcraft Case)

UNIT III

Supply Chain: The Role of Sourcing – Components – Key Process – Outsource: Various Mechanism – Third-party logistics (3PL): Service.

UNIT IV

Analytical tools: Analytical Tools in Sourcing (Total Cost of Ownership (Wire Harness case), Pricing Analyses - (Plastic Shield case)) – Analytical Tools in Sourcing (Foreign Exchange Currency Management, Learning Curve, Quantity Discount Models) – Integrative Pacific Systems Case (Supplier Scorecard, Sourcing Risk, Supplier Financial Analysis).

UNIT V

Risks & Trends: Sourcing Risk Management (Concepts) – Electronic Sourcing – Sustainability and Sourcing (Green Sourcing; Walmart-China Case)

TEXT BOOKS:

1. Sunil Chopra and Peter Meindi, Supply Chain Management – Strategy Planning and Operation, Pearson Education, Third Indian Reprint, 2004.
2. Monczka et al., Purchasing and Supply Chain Management, Thomson Learning, Second edition, Second Reprint, 2002.

REFERENCE BOOKS:

1. Lee J. krajewski and Larry P.Ritzman, 2007, Operations Management strategy and analysis, 9th Edition, Pearson Eduction / Prenctice Hall of India, 2007.
2. Altekar Rahul V, Supply Chain Management – Concept and cases, Prentice Hall India, 2005.
3. Olivier Bruel, Strategic Sourcing Management: Structural and Operational Decision-making Kogan Page; 1 edition, 2016.

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	SUPPLY CHAIN ANALYTICS	**100**	**4**	**0**	**0**	**3**

UNIT I

Introduction – Overview on Supply Chain, Analytics and Supply Chain Analytics – Dashboards with relevant KPIs for Supply Chain – Optimization – Classification of optimization problems – Optimization for Analytics – Operations Research Techniques for Analytics.

UNIT II

Location and Layout: Plant/Warehousing Decisions – Location Methods – Location Models – Network Models – Layout Methods – Line Balancing: KPIs (Cycle time, Idle time) – Inventory Management

UNIT III

Total Quality Management: Introduction – Statistical Quality Control (SQC) – Statistical Process Control (SPC) – Pareto Analysis – Histogram – Scatter Diagram – Control Charts – Process Capability Analysis: KPIs (C_p and Cpk)

UNIT IV

Planning & Multi Attribute Decision Making: Capacity Planning – Measurement of Capacity: KPIs (Efficiency and Utilization) – Aggregate Production Planning (APP): Model, Techniques – Multi Attribute Decision Making (MADM) – Analytic Hierarchy Process.

UNIT V

Simulation & DOE: Introduction to simulation – Type: Discrete and Continuous simulation – Simulation models – Steps in Simulation study – Simulation for Analytics – Experimental Designs (Taguchi, RSD, Mixture Design).

TEXT BOOKS:

1. James R. Evans., Business Analytics – Methods, Models and Decisions, Pearson Publications, 1st Edition, 2012.
2. G.V.Shenoy,U.K.Srivastava,S.C.Sharma, Operations Research for Management, New Age International,Revised 2nd Ed, 2005.

REFERENCE BOOKS:

3. Gerad Feigin, Supply Chain planning and analytics – The right product in the right place at the right time, Business Expert Press, 2011
4. Peter Bolstorff, Robert G. Rosenbaum, Supply Chain Excellence: A Handbook for Dramatic Improvement Using the SCOR Model, AMACOM Div American Mgmt Assn, 2007
5. Robert Penn Burrows, Lora Cecere, Gregory P. Hackett, The Market-Driven Supply Chain: A Revolutionary Model for Sales and Operations Planning in the New On-Demand Economy, AMACOM Div American Mgmt Assn, 2011

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY - GURAJADA - VIZIANAGARAM
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TRAVEL AND TOURISM MANAGEMENT
III SEMESTER

	Travel Agency and Tour Operations	**100**	**4**	**0**	**0**	**3**

Objective: To understand the significance of travel agency and tour operation business, the current trends and practices in the tourism and travel trade sector and to develop adequate knowledge and skills applicable to travel industry.

UNIT-I Travel Trade: Historical Perspectives: Emergence of Thomas Cook- Cox and Kings- American Express Company, Types of Tour & Types of Tour Operators: Full Service AgencyCommercial Agency-Implant Agency-Group / Incentive Agency, Wholesale and Retail Travel Agency Business: Linkages and Integration with the Principal Service Providers, Changing Scenario of Travel Trade.

UNIT-II Travel Agency and Tour Operation Business: Functions of Travel Agency - Setting Up A Full-Fledged Travel Agency - Sources of Income of A Travel Agency - Diversification of Business - Travel Insurance, Forex- Cargo- MICE – Documentation, Recognition: IATA Accreditation - Recognition from Government.

UNIT-III Itinerary Planning & Development: Tour Itinerary: Types of Itinerary - Resources and Steps for Itinerary Planning - Do‘s and Don‘ts of Itinerary Preparation, Tour Formulation and Designing Process :FITs & Group Tour Planning and Components - Special Interest Tours (SITs).

UNIT-IV Tour Packaging & Costing: Tour Packaging: Classifications of Tour Packages - Components of Package Tours, Concept of Costing: Types of Costs - Components of Tour Cost - Preparation of Cost Sheet, Tour Pricing: Calculation of Tour Price - Pricing Strategies - Tour Packages of Thomas Cook, SOTC, MakeMyTrip and Cox & Kings.

UNIT-V Travel trade Organizations: Objectives, Activities and Functions of UFTAA, PATA, TAAI, IATO, ASTA, ATOI, ADTOI, IAAI, TAFI.

Suggested Readings:

1. Bhatia, A.K. (2013). The Business of Travel Agency and Tour Operations Management. New Delhi: Sterling Publishers (P) Ltd.
2. Goeldner, R., & Ritchie, B. (2010). Tourism, Principles, Practices and Philosophies. London: John Wiley & Sons.
3. Negi, J. (2005). Travel Agency Operations: Concepts and Principles. New Delhi: Kanishka.
4. Negi, K.S. (2011). Travel Agency Management. New Delhi: Wisdom Press.
5. Roday, S., Biwal, A., & Joshi, V. (2009). Tourism Operations and Management. New Delhi: Oxford University Press.
6. Swain, S.K. & Mishra, J.M. (2011). Tourism Principles and Practices. New Delhi: OUP.

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	HOSPITALITY MANAGEMENT	100	4	0	0	3

Objective: To study the flow of activities and functions in today‘s Hotel operation, familiarize with Hotel and resort management and to establish the importance of various departments and its role in the Hospitality Industry.

UNIT-I Introduction to Hospitality Industry: Distinctive Characteristics: Inflexibility Intangibility-, Perishability - Fixed Location- Relatively Large Financial Investment etc.; Concepts of ‒Atithi Devo Bhavah‖; Hotel and Lodging facilities; Types of Hotels; Classification of Hotels, Chain Operations, Alternative Accommodation; E- Hospitality; Ethical and Regulatory Aspects in a Hotel, International Hotel Regulations, Fiscal and Non-Fiscal Incentives Offered to Hotel Industry in India.

UNIT- II Front Office : Duties and Responsibilities: Reservation & Registration- Meal Plans Room Assignments- Check-in- Departure- Handling Guest Mail- Message Handling- Guest Paging Methods of Payment; Guest Services: Type of Hotel Guests- Types of Meal Plans Wake-up call.

UNIT- III Housekeeping: Hierarchy, Duties & Responsibilities of Housekeeping Staff; Important Functions of Housekeeping Management; Types of Accommodation; Activities in Accommodation Management: Room Service- Room supplies- Types of Room- Types of Bedding and Other Related Types of Service; Liaison with Other Departments.

UNIT- IV Food & Beverage : Hierarchy, Duties & Responsibilities of Staff; Food Production Organization: Kitchen-Buffets-Beverages Operation &Functions; Outlets of F & B; Types of Restaurant Menu; Catering Services: Food Service for the Airlines- BanquetteCorporate- MICE-Retail Food Market- Business/Industrial Food Service- Healthcare Food Service- Club Food Services; Trends in Lodging and Food Services.

UNIT-V Evaluating Hotel Performance: Methods of Measuring Hotel Performance: Occupancy Ratio- Average Daily Rate: Average Room Rate Per Guest- Rev PAR- Market Share Index-Evaluation of Hotel by Guest; Yield Management: Elements of Yield Management, Measuring Yield in the Hotel Industry, Benefits of Yield Management, Challenges or Problems in Yield Management.

Suggested Readings:

1. Negi, J. (2014). Professional Hotel Management. New Delhi: S. Chand.
2. Raghubalan, G., & Smritee, R. (2015). Hotel Housekeeping operations and Management. New Delhi: Oxford University Press.
3. Negi, J. (1984) .Hotels for Tourism Development: Economic Planning & Financial Management. New Delhi: S. Chand.
4. Tewari, J.R. (2016). Hotel front office operations and Management. New Delhi: Oxford publication. 5. Wood, R.C. (2013). Key Concepts of Hospitality Management. London: SAGE Publications, London.

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	RESORT PLANNING AND DESTINATION MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: To study the flow of activities and functions in today‘s Resort operation and to familiarize with Destination Management.

Unit – l: Resort: Concept, Evaluation. Scope, Trends and development - Roles of Resorts in Tourism and Hospitality, Nature of Demand of Resort - Deferent Types of Resorts- Product, Functional specifications - Strategy and organizational structures.

Unit – II: Resort Planning: Location, Feasibility analysis, Architecture, Macro & Micro business environment. The five phases of Resort planning and development - Economic analysis of Resort operation and Forecasting.

Unit – III: Impact analysis of Resorts: Social Impact, the economic impact, physical and environmental.

Unit – IV: Development of destination - Principles of destination development - Concerns for destination planning - Stages in destination designing and management.

Unit – V: Cultural tourism product: designing, development, issues and considerations - Religious tourism product: designing, development, issues and considerations - Heritage tourism product: designing, development, issues and considerations.

Suggested Readings:

1. Gee Chuck Y., Resort Development and Management
2. Stipnauk, David M. and Roffman, Harold, Facilities Management
3. Lawson , Hotels and Resorts: Planning, Design and Refurbishment

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	TOURISM POLICY AND PLANNING	**100**	**4**	**0**	**0**	**3**

Objective: To comprehend the conceptual dimensions and policies of tourism industry and to understand the dynamics of tourism businesses and its impacts.

Unit – I: Concept, need, objective, institutional framework and the principal lines of public tourism policy- Role of govt. public and private sector in formulation of tourism policy - Roles of international, national, state and local tourism organizations in carrying out tourism policies.

Unit – II: Goal of national administration and tourism policy - Policy making bodies and its process at national levels - Outline of L.K.Jha Committee (Ad-hoc Committee) - 1963, National Tourism Policy -1982, National Committee Report-1998, National Action Plan on Tourism - 1992.

Unit – III: National Tourism Policy-2002 - Opportunities for investments in hotel sector & Tourism related organizations - Incentives and concessions extended for tourism projects and resources of funding.

Unit – IV: Background, Approach and Process, Techniques of Plan Formulation - Planning for Tourism Destinations-Objectives, methods, steps and factors influencing planning -Destination life cycle concept.

Unit – V: Tourism planning at international, national, regional, state and local, the traditional, approach and PASLOP method of tourism planning - Important feature of five year tourism plans in India - Elements Agents, Processes and typologies of tourism development.

Suggested Readings:

1. Bezbarua M.P, Indian Tourism Beyond The Millenium
2. Burkart & Medlik, Tourism; Past, Present and Future
3. Gee, Chuck Y, James C. Makens , Dexter J. L. & Choy, The Travel Industry
4. Murphy, Peter H, Tourism: A Community Approach

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	RECREATION MANAGEMENT	100	4	0	0	3

Objective: To understand the dynamics of recreation products and their significance for tourism industry.

Unit – I Evolution of Transport Systems, Importance of Transport in Tourism, Major transport systems – rail, road, water transport.

Unit - II Air transport and its evolution, present policies and regulations pertaining to airlines, limitations of weights and capacities.Function of ICAO, DGCA, IATA, AAI. Evolution of Civil Aviation in India.

Unit – III Surface Transport System, Approved Transit Transport, Document connected with Road Transport, RTO, Recreational Vehicles, Road Taxies Fitness Certificates. Major Highways across India and abroad.

Unit – IV Rail Transport System, Major Railway System of world, Amtrak, Eurail, Brit Rail, Indian Railways. Past, Present, Future Tourist Trains, viz Palace on wheels, Royal Orient, Himalayan Queen. Facilities offered by Indian Railways. International Luxury trains : The Orient Express , Trans Siberian railway.

Unit – V Water Transport System, Historical Past, Cruise ship, River Canal boats. Future prospects and growth of Water Transport in India.

Suggested Readings:

1.Transport for tourism: Stephen Page
2.Tourism system : Mill, R.C. and Morrison

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TRAVEL AND TOURISM MANAEMENT
MBA IV SEMSESTER

	TRAVEL MEDIA AND JOURNALISM	**100**	**4**	**0**	**0**	**3**

Objective: To provide basic understanding about Travel Journalism and its role in tourism promotion, practical know-how on travel writing and the dynamics of making travelogues and to expose the students to the nitty-gritty‘s of travel blogging and E-documentation of tourism destinations.

UNIT-I Introduction to Travel Writing: Articles and Short Pieces of Travel Writing, Magazines, Travel Newsletters, Short Pieces for Books – Travel journalism and the Internet - Researching and Approaching Markets -Travel Books : Guide Books, Accommodation Guides, Business Travel Guides, Coffee Table Books, Autobiographical Tales, Anthologies-FAM Tour & Press trips.

UNIT-II Electronic Media and Documentation of Destinations: Methodical approaches in the coverage of travel and transport, events, hospitality and special-interest tourism resources - Nature of media coverage: webcast and telecast –Travel Blogs- Script writing for travel programs - Identifying points for visual support - Conducting interviews - Virtual tourism Preparation of travel footage.

UNIT -III Researching Topics: Sources of Information - Research on the Internet - Researching on the spot - Organizing research material-The importance of specializing.

UNIT-IV Developing Ideas for Travel Articles: Journey Pieces, Activity Pieces, Special Interest Pieces, Side-trips, Reviews - Ideas from own travel experiences - Ideas from other sources.

UNIT-V How to portray the experiences: Using the Senses- Practical Tips; Choosing the Right Words, Verbs, Adjectives and Phrases, And Usages- Illustrations - The Practicality of Taking Photographs, Non-Photographic Illustrations.

Suggested Readings:

1. Arvaham, E. & Ketter, E. (2008), Media Strategies for Marketing Places in Crisis, UK: Elsevier.
2. Brunt. P (1997), Market Research in Travel and Tourism, UK: Butterworth and Heinemann.
3. Bryan Pirolli. (2016). Travel Journalism. London: Taylor and Francis.
4. Clark, R.M., Wood, R.C.(1998), Researching and Writing Dissertations in Hospitality and Tourism, UK.
5. Greenman, J. F. (2012). Introduction of Travel Journalism. New York: Peter Lag.
6. Macdonald, J. (2000). Travel Writing, London: Robert Hale.
7. Neilson, C. (2001), Tourism and the Media: Tourist Decision Making, Information and Communication, Melbourne: Hospitality Press.
8. Neilson, C. (2001). Tourism and the Media: Tourist Decision Making, Information and Communication, Melbourne: Hospitality Press.
9. Reijnders, S. (2016). Places of the Imagination Media, Tourism, Culture. London: Routledge.

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	EVENT MANAGEMENT	100	4	0	0	3

Objective: To enrich the level of knowledge about management of different types events and different aspects, functions of events and To help the students understand different aspects and functions of events; and to provide sufficient opportunities to use knowledge and skill in event business.

UNIT – I Event Business: Types of Events - Size of Events - Five C's of Event Management - Trends of Event Business - Scope of Event Business - Roles and Functions of Event Manager - Attributes of Technical Staff - Preparation of Operation Manual - Developing Record Keeping Systems.

UNIT – II Selection of Event Site: Layouts and Designs - Site Map or Plan-Audiovisual - Lighting and Sound - Special Effects and Video - Event Technology, Event Laws & Regulations - Permissions Required for Holding An Event: Police Permissions - Traffic Police, Ambulance, Fire Brigade and Municipal Corporation- Indian Performing Rights Society (IPRS) - Performing License - Entertainment Tax - Permissions for Open Ground Events - License for Serving Liquor - Waste Management & Green Certification.

UNIT – III Planning and Scheduling Events: Managing Events - Corporate Events - Trade Shows and Exhibitions - Events in Educational Institutions - Budgeting of MICE - Use of Budget Preparation - Estimating Fixed and Variable Costs - Cash Flow - Sponsorship and Subsides -Ethical Behavioral Practices in MICE industry.

UNIT – IV Bidding for Events: Events Theme- Color, Decor, Focal Points, Fabrics, Furnishing, Lighting, Audio visual - Event Logistics: Security, Transport, Parking, Accommodation, Special Needs and Disabled Requirements.

UNIT – V Logistics: Procedures - Performance Standards - Event Networks and Supply Chain - Handling Vendors and Service Contractors - Negotiating With Vendors and Service Contractors.

Suggested Readings:

1. Fenich, G.G. (2014). Production and Logistics in Meeting, Expositions, Events and Conventions. Edinburgh: Pearson.
2. Robincon, P., Wale, D., & Dickson, G. (2010). Events Management _Ed'. London: CABI.
3. Editorial Data Group USA (2018). Exhibition & Conference Organizers United States: Market Sales in the United States Kindle Edition.
4. Johnson, N. (2014). Event Planning Tips: The Straight Scoop on How to Run a Successful Event (Event Planning, Event Planning Book, Event Planning Business). MCJ Publishing. Kindle Edition.
5. Mittal, S. (2017). Event Management: Ultimate Guide to Successful Meetings, Corporate Events, Conferences, Management & Marketing for Successful Events: Become an event planning pro & create a successful event series. Alex Genadinik Publication. Kindle Edition.

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	FRONT OFFICE MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: To study the flow of activities and functions in today's Hotel operation, familiarize with Hotel and resort management; and to establish the importance of front office in various hotels.

Unit – I: Introduction to Hotel and Lodging facilities; Types of Hotels; Classification of Hotels, Chain Operations, Alternative Accommodation; E- Hospitality; Ethical and Regulatory Aspects in a Hotel, International Hotel Regulations, Fiscal and Non-Fiscal Incentives Offered to Hotel Industry in India

Unit – II: Front Office Organization: Basic Layout and Design, Departmental Organizational Structure. Front Office Personnel: Departmental Hierarchy. Attitude and Attributes and Salesmanship. Job Descriptions and Job Specifications of Front Office Personnel.

Unit – III: Front Office Operations: The Front Desk- Equipments in use. The Guest Room- Types and Status Terminology. Key Controls. Tariff plans. Types of rates.

Unit – IV: Reservations: Need for reservations, definitions, importance of reservations. Types of reservations. Sources and modes of reservations. Individual and group bookings. Booking instruments - Booking diary, Conventional charts, A & D register etc. The Reservation Cycle. Hotel Reservation Systems, CRS, Inter-sell agencies, Internet applications.

Unit – V: Franchise and management contracts. Indian Chain of Hotels. Target Markets. Alternate Lodging facilities.

Suggested Readings:

1. Negi, J. (2014). Professional Hotel Management. New Delhi: S. Chand.
2. Raghubalan, G., & Smritee, R. (2015). Hotel Housekeeping operations and Management. New Delhi: Oxford University Press.
3. Negi, J. (1984) .Hotels for Tourism Development: Economic Planning & Financial Management. New Delhi: S. Chand.
4. Tewari, J.R. (2016). Hotel front office operations and Management. New Delhi: Oxford publication.
5. Wood, R.C. (2013). Key Concepts of Hospitality Management. London: SAGE Publications, London.

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	INFORMATION TECHNOLOGY AND TOURISM	**100**	**4**	**0**	**0**	**3**

Objective: To familiarize with information technology and tourism business concept and acquaint with E-commerce and E-business and its strategies

Unit – l: Understanding the Hardware: Bit and related measuring terms, I/O and storage devices; components of desktop; buying a computer Lab; demonstrate on open computer and explain its components.

Unit – Il: Operating systems: Basic functions and types of an operating systems; comparative illustrations from popular operating systems.

Unit – Ill: Communication and Protocols; working knowledge of Internet protocols; application of electronic communication tools in business; collaborative tools.

Unit – IV: Understanding database basic terminology; types of databases Lab; creating and relating tables in a microdatabase; basic queries for data analysis; import / export of data in different formats; link with other products like word processors, database, spreadsheets etc.

Unit – V: Electronic commerce-Overview-Business to Government, Business to consumers, Business to business, consumers to consumers, online Stock trading & Market Features, Capabilities and Limitations.

Suggested Readings:

1. Laudon, K.C & Laudon, Jane P.management Information System
2. Kishore, Swapna and Naik Rajesh, SQL for Professional
3. Anderson, Virginia, Access 2002-the complete reference.

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	ECO TOURISM PRACTICES	100	4	0	0	3

Objective: To comprehend the theories and practices of ecotourism and understand the problems of sustainable development, ecotourism and identify solutions.

UNIT-I Fundamentals of Ecology: Ecotourism-Evolution, Principles, Trends and Functions of Ecotourism- Environmentalism, sustainable development-Pollution-Ecological Foot Prints.

UNIT-II Tourism & Ecology: Mass Tourism Vs Ecotourism-Typology of Eco-tourists-Ecotourism Activities & Impacts-Quebec Declaration 2002 - Kyoto Protocol 1997- Ecotourism and globalization.

UNIT-III Ecotourism Policies, Planning: Carrying Capacity - Alternative Tourism-Responsible Ecotourism- Community Participation - Types of Participation - Ecotourism Projects - Case Studies on Periyar National Park, Thenmala Eco-Project, Similipal Ecotourism Project - Nandadevi Biosphere Reserve - Gulf of Mannar - Kruger National Park, South Africa.

UNIT -IV Sustainable Development- Evolution - Principles, Major Dimensions of Sustainability- 10 R‘s-Stockholm Conference 1972 - Brundtland Commission – The Rio Declaration 1992 - World Conference on Sustainable Tourism 1995 - WSSD 2002, The Cape Town Declarations.

UNIT-V Global Warming & Climate Change: Eco-friendly Practices - Role of International Ecotourism Society - UNWTO, WWF, UNDP - Department of Forest and Environment - Government of India- ATREE- EQUATIONS.

Suggested Readings:

1. Ballantyne, R. and Packer, J. (2013). International Handbook on Ecotourism. United Kingdom: Edward Elgar Publishing Ltd.
2. Fennel, D. A. (2002), Ecotourism Policy and Planning. USA: CABI Publishing.
3. Fennell, D.A. (2008). Ecotourism Third Edition. New York: Routledge Publication.
4. Goodwin, H. (2011). Taking Responsibility for Tourism. Woodeaton: Goodfellow Publishers Limited.
5. Honey. (2008). Ecotourism and Sustainable Development: Who Owns Paradise? 2nd Edition. Washington, DC: Island Press.
6. Strange, T., and Bayley, A. (2008). Sustainable Development. Linking Economy, Society, Environment. Paris: OECD.
7. Tiwari, S.K., & Upadhyay, R.K. (2017). Conservation of Degraded Wetland System of Keoladeo National Park, Bharatpur, India. Ecological Complexity, pp74- 89.
8. Weaver, D. (2001). The Encyclopedia of Ecotourism. London: CABI Publication.

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HEALTH CARE AND HOSPITAL MANAGEMENT

MBA III SEMESTER

	HOSPITAL ORGANIZATION AND MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: To familiarize the students with the basic concepts and principles of management, organization and leadership on hospitals.

Unit-1: Role of a professional manager in a Hospital: concept of management – evolution of management thought – significance of hospital management – role and importance of hospital management – Responsibilities of an Hospital Manager – The transition factors of hospital management.

Unit-II: Managerial function in a hospital: Management process, managerial skills, levels of management, application of managerial functions in hospital. Decision making models in hospital – steps in decision making – techniques and process of decision making – overcoming barriers to effective decision making.

Unit-III: Behavioural concepts and theories: cognitive process, perception and its stages, creativity and problem solving. Process of motivation – Theories of motivation – Motivating medical and paramedical professionals. Leadership styles and influence process – features and importance of leadership – Leadership styles – Successful VS Effective leader.

Unit-IV: Organization structure and planning process: Introduction – nature and structure of the hospital organization – formal and informal organizations – factors influencing the choice of structure – Line and Staff relationship – Desigining structure for a service organization. Strategic and operational planning – Planning practices in Indian hospitals. Controlling – process of control and methods of control.

Unit-V: Organizational climate and social responsibility: Meaning, need, significance of organizational climate – distinction between culture and climate. Need, nature and causes of organizational change – management of change in hospitals. Social responsibilities of hospital management – objectives – responsibilities of hospital manager.

Suggested Readings:

1. Koontz & Weirich, Essentials of Management, Tata McGraw Hill Publishing Company, New Delhi.
2. Stoner, Freeman & Gilbert, Management, PHI, 6th Edition.
3. Robbins.S.P., Fundamentals of Management, Pearson, 2003.
4. Robbins.S. Organisational Behaviour, X edn., Prentice-Hall, India.
5. Umasekaran, Organisational Behaviour.

6. VSP Rao, V Hari Krishna – Management: Text and Cases, Excel Books, I Edition, 2004

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	HEALTH CARE POLICIES AND DELIVERY SYSTEM	**100**	**4**	**0**	**0**	**3**

Objective: To understand the importance of health care policies and to be acquainted with the disaster and safety, delivery system.

UNIT I Introduction – Theoretical frame work – Environment – Internal and External – Environmental scanning – Economic Environment – Competitive Environment – natural Environment – Politico Legal Environment – socio Cultural Environment- International and Technological Environment.

UNIT II A Conceptual Approach to Understanding the Health Care Systems – Evolution – Institutional Settings – Out Patient services – Medical Services – surgical Services – Operating Department – Pediatric services – Dental services – Psychiatric services – casualty & Emergency services – Hospital Laboratory services – Anesthesia services – Obstetric and Gynecology services – Neuro – Surgery service – Neurology services.

UNIT III Overview of Health care sector in India – Primary care – Secondary care – Tertiary care – Rural Medical care – urban medical care – curative care – preventive care – General & special Hospitals – Understanding the hospital management – Role of medical, Nursing staff, Paramedical and Supporting Staff – Health Policy – Population Policy – Drug Policy – Medical Education Policy.

UNIT IV Health Care Regulation – WHO, International Health Regulations,IMA, MCI, State Medical Council Bodies, Health universities and Teaching Hospitals and other Health care Delivery Systems.

UNIT V Epidemiology – Aims – Principles – Descriptive, Analytical and Experimental Epidemology – Methods – Uses.

Suggested Readings:

1. A & Lee, K., Economics of Health, OUP, Oxford, 1983.
2. Liz Haggard, Sarah Hosking, Healing the Hospital Environment: Design, Maintenance, and Management of Healthcare Premises
3. Park JE, Park K., Textbook of preventive and social medicine, 20th edition, Banarsidas Bhanot Publishers. 2009

4. S.L GOEL, Healthcare Management and Administration, Deep & Deep publications Pvt.Ltd., New Delhi.

	HEALTH ECONOMICS	**100**	**4**	**0**	**0**	**3**

Objective: It is intended to provide an in-depth knowledge about the sources of funds and its effective utilization to achieve a better quality of health care services within a reasonable cost.

Unit I: Introduction of Economics Nature of Economics Analysis - – functioning of Economic systems – Circular flow and interdependence of Economic activity – Basic Economic concepts – scarcity – Opportunity cost – Discounting principle – Concept of marginal Utility – Demand – Supply and Elasticity – Relevance of Economics to health and medical care.

Unit II: Demand Analysis and Production Function Utility analysis – Nature of Demand and determinants – law of demand – Elasticity of Demand – Supply Curves – Cost Concepts and Cost Analysis. Production function – production with one variable input. Law of variable proportion: production with two variable inputs: production isoquant: isocost lines. Estimating production functions: cost concepts and break even analysis.

Unit III: Health Determinants Unique Nature of Health – Health as a Consumer and investment Good – Valuation of Health – Externalities in Health care – Economic Evaluation in Healthcare.

Unit IV: Market Analysis Market Configuration – price determination under different marker conditions- nature and Characteristics of Health care markets – Demand for supply of health care services – Market failure and Government intervention and control.

Unit V: Health care Finances and Trends Health care indicators – Health policies -Health care expenditure – Financing of Health care, Allocations under 5 year plans – National Rural Health Machine (NRHM) – Human Development indices. .Public Health in India: Public health challenges, cost concern, consumer empowerment, fostering experimentation in the health sector. New delivery and financing models, policy reform and entrepreneurial ventures, innovation in health delivery organization.

Suggested Readings:

1. Dwivedi D.N, Micro Economic Theory, Vikas publications, New Delhi 1996
2. James Henderson , Health Economics and policy – South Western College publishing
3. Paul S, Reading in Economics, Tata McGraw Hill
4. Rexford E Santerre , Health Economics Dryden Publishers, Florida (USA) 2000
5. Mills.A.& Lee, k., Economics of Health, OUP Oxford, 1983
6. UNDP, Human Development report, OUP, Newyork
7. Peter Zweible , Health Economics, Oxford university Press, Oxford
8. V Raman Kutty, A Premier of Health Systems Economics, Allies Publication Ltd. New

Delhi.

9. H.S.Rout&P.K.Panda, Health Economics in india, New Century Publications, New Delhi

	HOSPITAL FUNCTIONS AND SUPPORT SERVICES	**100**	**4**	**0**	**0**	**3**

Objective: To get familiarised with support service systems and to get acquainted with hazards and its management in hospital environment.

UNIT I Nutrition and Dietary services – Pharmacy services – Medical Records services.

UNIT II Facilities Engineering – Maintenance of Civil Assets – Electrical supply and Water supply – Medical gas pipeline – Plumbing and Sanitation – Air conditioning system – Hot water and Steam supply – Communication Systems –Biomedical engineering departments in modern hospitals.

UNIT III Laundry services – House keeping services – CSSD-Energy conservation methods – AMC.

UNIT IV Ambulance services – Mortuary services – Hospital security services.

UNIT V Disaster management – Fire hazards – Engineering Hazards – Radiological hazards.- Outsourcing of Support services –Waste disposal and management.

Suggested Readings:

G.D.Kunders, Hospital and Facilities Planning and Design
Jacob Kline, Hand book of Bio-Medical Engineering
Webster J.G and Albert M. Coo, Clinical Engineering Principles and Practices
Antony Kelly, Maintenance Planning and Control

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	REVENUE CYCLE MANAGEMENT	100	4	0	0	3

Objective: to manage the administrative and clinical functions associated with claims processing, payment, and revenue generation. The process encompasses the identification, management, and collection of patient service revenue.

UNIT I Meaning and scope of patient care services – significance of patient care – role of administration in patient care – classification of Hospital – Role and functions of Administrator in hospitals.

UNIT II Front office services – outpatient services – inpatient services – Accident and Emergency services – Billing services – other services

UNIT III Lab services – Radiology and Imaging services – Rehabilitation services – Blood bank services – Telemedicine

UNIT IV Operation theatre – Intensive care units – Hospital acquired infections – Sterilization – Nursing services – Ward Management

UNIT V Concept of quality – Quality control – Quality assurance – ISO 9000 standards – Total Quality Management – Accreditation – NABL – JCAHQ – Quality manual – Medical tourism

Suggested Readings:

Management process in Health care - S.Srinivasan

Hospital Department Profiles - Gold Berry A.J

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY - GURAJADA - VIZIANAGARAM
VIZIANAGARAM 535 003 Andhra Pradesh (India)

HEALTH CARE AND HOSPITAL MANAGEMENT
MBA IV SEMESTER

	PATIENT CARE AND SERVICES MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: To understand the importance of patient care management and acquainted with the disaster, safety and Security Management in Hospitals.

UNIT I Patient centric management - Concept of patient care, Patient-centric management, Organization of hospital departments, Roles of departments/managers in enhancing care, Patient counseling & Practical examples of patient centric management in hospitals-Patient safety and patient risk management.

UNIT II Quality in patient care management-Defining quality, Systems approach towards quality, Towards a quality framework, Key theories and concepts, Models for quality improvement & Variations in practice

UNIT III Patient classification systems and the role of casemix-Why do we need to classify patients, Types of patient classification systems, ICD 9 (CM, PM), Casemix classification systems, DRG, HBG, ARDRG, Casemix innovations and Patient empowering classification systems.

UNIT IV Medical ethics & auditory procedures-Ethical principles, Civic rights, Consumer Protection Act, Patient complaints powers & procedures of the district forum, State and National commission, Patient appeals, Autopsy, Tort liability, Vicarious liability, Medical negligence, Central & state laws, Use of investigational drugs, Introduction/need & procedures for medical audit, Audit administration & Regulating committees-Confidentiality and professional secrecy, ethics of trust and ethics of rights – autonomy and informed consent, under trading of patient rights – universal accessibility – equity and social justice, human dignity

UNIT V Disaster preparedness-Policies & procedures for general safety, fire safety procedure for evacuation, disaster plan and crisis management . Policies & procedures for maintaining medical records, e-records, legal aspects of medical records, its safety, preservation and storage.

Suggested Readings: Goel S L & Kumar R. HOSPITAL CORE SERVICES: HOSPITAL ADMINISTRATION OF THE 21ST CENTURY 2004 ed., Deep Deep Publications Pvt Ltd: New Delhi

Gupta S & Kant S. Hospital & Health Care Administration: Appraisal and Referral Treatise 1998 ed., Jaypee, New Delhi

	MANAGED HEALTH CARE AND INSURANCE	**100**	**4**	**0**	**0**	**3**

Objective: The student is expected to understand the nuances of insurance and in particular the health insurance.

Unit I Introduction – Economics of life and health insurance – importance, socio political realities insurance terminology.

Unit II Health policy vis-à-vis health insurance policies – Indian scenario - Different products – Demand and Scope – Limitations.

Unit III Administration of health insurance schemes like CGHS and ESI and Social security measures. TPAs, Governing mechanisms including IRDA.

Unit IV Health insurance Taxation. Standardization and grading of hospital services, Role of vigilance and real time information about the services.

Unit V Health insurance providers – Government and private – micro insurance, the role and responsibilities of provider – insurer – Patient and the Regulatory Agencies.

Suggested Readings:

Gupta, P.K, Insurance and Risk Management, Himalaya Publishing house,2004

	HEALTH LAWS, ETHICS AND REGULATIONS	**100**	**4**	**0**	**0**	**3**

Objective: To get acquainted with the legal provision and issues related to health care, to familiarise with the medical terminologies and to understand the ethical issues in health care system.

UNIT I Laws relating to Hospital formation: Promotion-Forming society-The Companies Act-Law of Partnership-A Sample Constitution for the Hospital-The Tamil Nadu Clinics Act – Medical Ethics.

UNIT II Laws relating Purchases and funding: Law of contracts-Law of Insurance-Export Import Policy- FEMA-Exemption of Income Tax for Donations-Tax Obligations: Filing Returns and Deductions at Source. Laws pertaining to Health: Central Births and Deaths Registration Act, 1969- Recent amendments – Medical Termination of Pregnancy Act, 1971 – Infant Milk Substitutes, Feeding Bottles and Infant Food Act, 1992.

UNIT III Laws pertaining to Hospitals: Transplantation of Human Organs Act, 1994 – Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 – Medical Negligence – Medico Legal Case – Dying Declaration-MCI act on medical education. The Biomedical Waste (Management and Handling) Rules-Radiation Safety System.

UNIT IV Medical Terminology- Glossary of medical terms: major Diseases and medical specialties-Roots, Prefixes, Suffixes, Abbreviations and symbols-Common roots: element referring to, usage and definition-Common prefixes and suffixes-Common abbreviations: departments, time, general healthcare, routes of medication and laboratory-Symbols.

UNIT V Illness- Classification and description of diseases-Infection Control- Medical asepsis, Nosocomial infection and communicable diseases, Reservoir, carrier and mode of transmission-Overview of Hospital Services -Intensive care unit – Coronary care Unit – Burns, paraplegic & Malignant disease treatment – Hospital welfare services – Hospital standing services – Indian red cross society – Nursing services- Pharmacy – Medical Stores – Housekeeping – Ward Management – Central sterile supply department-Medical Records – Fatal documents – Medical Registers – Statutory records.

Suggested Readings:

BM Sakharkar, Principles of Hospital Administration and Planning, Jaypee brothers Publications.

Francis CM,Mario C de Souza ; Hospital Administration – Jaypee brothers Medical Publishers.

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	HOSPITAL MANAGEMENT AND INFORMATION SYSTEMS	100	4	0	0	3

Objective: To understand the role of IT in hospital management and to familiarise with the latest developments in technology with relevance to hospitals.

Unit I The Information Explosion: Information is important – Impact on society – Impact on teaching and learning – Impact on Government – Impact on Healthcare – The future of healthcare technology – The future healthcare record – Preparing for the future – Summary. The world of Informatics.

Unit II The Electronic health record: Functions of the health record –Changing functions of the patients record – Advantages of the paper record – Disadvantages of the paper record – Optically scanned records – The electronic health record – Automating the paper record – Advantages of the EHR – Disadvantages of the EHR – Bedside or point-or-care systems – Human factors and the EHR – Roadblocks and challenges to EHR implementation –The future

Unit III Securing the Information: Privacy and confidentiality and Law – Who owns the data? – Security – Computer crime – Role of healthcare professionals – Summary. Information Systems cycle: The information systems cycle – Analysis – Design phase – Development – Implementation – Why some projects fails?

Unit IV Electronic Communications: A bit of history – Hardware and software for connecting – Methods of accessing information – World Wide Web (WEB) – Communication Technologies

Unit V Telehealth– Historical perspective on telehealth – Types of Technology – Clinical initiatives – Administrative initiatives – Advantages and Barriers of telehealth – Future trends – Summary- The future of Informatics: Globalization of Information Technology – Electronic communication – Knowledge management – Genomics – Advances in public health – Speech recognition – Wireless computing – Security – Telehealth – Informatics Education – Barriers to Information Technology implementation.

Suggested Readings: Kathleen M., Informatics for Healthcare Professional James O'Brien, Tat McGraw Hill,

Management Information System Peter Norton, Introduction to computer, Tata McGraw Hill

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	HEALTH ANALYTICS	**100**	**4**	**0**	**0**	**3**

Objective: the role of data analytics in quality and performance improvement efforts, the tools and techniques used for data analytics in health care organizations.

UNIT I: Quality Improvement and Data Analytics – Meaning – Drivers for health care transformation - Identify quality initiatives that have shaped the national health care landscape - Health care quality and value - background and evolution of quality and performance improvement - Quality improvement frameworks that utilize analytics .

UNIT II: Health Care Data as an Organizational Asset - Data information, knowledge and wisdom hierarchy- organizational asset - sources of health care data – challenges for quality and performance improvement - organizational approach for effective use of data analytics

UNIT III: Working with Data - information value chain - importance of data context and relevance to business processes - common data types - basic statistical terms - Recognize common patterns or distributions in statistics - distributions using numerical measures such as mean, median and standard deviation - common graphical representations of data including histograms, bar charts and scatterplots

UNIT IV; Data Analytics Tools and Techniques – Definitions - Process steps of data analytics and the tools - role of the data analyst - tools and techniques used to analyze and interpret healthcare data effectively - various types of databases and how they are structured - data warehouse concepts - enterprise data architecture in health care organizations.

UNIT V: Solve Problems- measures, metrics, and indicators- purpose and use of Key Performance Indicators (KPI‘s) - health care organizations use the IHI Triple Aim to prioritize performance goals - DMAIC problem-solving model and the tools and techniques used in each step of the process - Apply the DMAIC methodology to a health care issue.

Suggested Readings:

Trevor L. Strome (2013). Healthcare Analytics for Quality and Performance Improvement. John Wiley & Sons, Inc

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AGRO BUSINESS

MBA III SEMESTER

	AGRO MARKETING MANGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: The objective of this course is to give the students an understanding of concept, various policies, strategies and decisions relating to marketing that can be developed by agribusiness firms.

UNIT I Meaning and scope, agricultural marketing and economic development Agricultural market structure - meaning, components and dynamics of market structure; marketing strategy - meaning & significance, formulation of marketing strategy; agribusiness marketing environment, design of marketing mix, market segmentation and targeting, determinants of consumer's behaviour.

UNIT II Product management – Introduction - process and decisions, new product development - significance and classification of new product, stages and estimation of demand of new product; product life cycle.

UNIT III Product policies and practice for agribusiness - determinants of price, objectives of pricing policies and pricing methods.

UNIT IV Promotional management - advertising planning and execution; sales promotion; grading and standardization.

UNIT V Distribution management - storage and warehousing and transportation management for agricultural products; marketing agencies/intermediaries – role and functions; distribution channels involved in agribusiness.

Suggested Readings:

Acharya SS & Agarwal NL. 2004. Agricultural Marketing in lndia" 4th Ed. Oxford & lBH. Kohls RL & Uhj JN. 2005.

Marketing of Agricultural Products.gth Ed. Prentice Hall. Kotler P. 2002.

Marketing Management - Analysis, Planning, implementation and Control. Pearson Edu.

Krishnamacharyulu C & Ramakrishan L. 2002. Rural Marketing. Pearson Edu.

Ramaswamy VS & Nanakumari S. 2002. Marketing Management.2nd Ed. Mac Millan India.

	AGRO BUSINESS AND RURAL GREEN MARKET	**100**	**4**	**0**	**0**	**3**

Objective: To develop understanding regarding issues in rural markets like rnarketing environment, consumer behaviour, distribution channels, marketing strategies, etc.

UNIT I Concept and scope of rural green marketing, nature and characteristics of rural markets, potential of rural rnarkets in India, rural communication and distribution.

UNIT II Environmental factors - socio-cultural, economic, demographic, technological and other environmental factors affecting rural green marketing.

UNIT III Rural consumer's behaviour - behavior of rural consumers and farmers; buyer characteristics and buying behaviour; Rural v/s urban markets, customer relationship management, rural market research.

UNIT IV Rural green marketing strategy - Marketing of consumer durable and non-durable goods and services in the rural markets with special reference to product planning; product mix, pricing objective, pricing policy and pricing strategy, distribution strategy.

UNIT V promotion and communication strategy - Media planning, planning of distribution channels, and organizing personal selling in rural market in India, innovation in rural marketing.

Suggested Readings

Krishnamacharyulu C & Ramakrishan L. 2002. Rural Marketing. Pearson Edu.
Ramaswamy VS & Nanakumari S. 2006. Marketing Mandgement.3rd Ed. MacMillan Publ.
Singh AK & Pandey S. 2005. Rural Marketing. New Age' Singh Sukhpal.2004.
Rural Marketing. Vikas Publ. House

	AGRO BUSINESS ENVIRONMENT	**100**	**4**	**0**	**0**	**3**

Objective: To expose learners to the environment in which the agri-business is conducted. Focus will be on understanding micro and macro environmental forces and their impact on agri-business.

UNIT I Role of agriculture in Indian economy; problems and policy changes relating to farm supplies, farm production, agro processing, agricultural marketing, agricultural finance etc. in the country.

UNIT II Structure of Agriculture - Linkages among sub-sectors of the Agro business sector; economic reforms and lndian agriculture; impact of liberalization, privatization and globalization on Agro business sector.

UNIT III Emerging trends in production, processing, marketing and exports; policy controls and regulations relating to the industrial sector with specific reference to agro-industries.

UNIT IV Agro business policies- concept and formulation; and new dimensions in Agro business environment and policy.

UNIT V Agricultural price and marketing policies; public distribution system and other policies.

Suggested Readings:

Adhikary M. 1986. Economic Environment of Business. S. Chand & Sons.
Aswathappa K. 1997. Essentials of Business Environment Himalaya Publ.
Francis Cherunilam 2003" Business Environment. Himalaya Publ.

	AGRO SUPPLY MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: The concepts and processes of agricultural supply chain management, framework for structuring supply chain drivers; network designs, demand forecasting, inventory planning, sourcing decisions and lT enablement of supply chain.

UNIT I Supply Chain: Changing Business Environment SCM: Present Need; Conceptual Model of Supply Chain Management; Evolution of SCM; SCM Approach; Traditional Agri. Supply Chain Management Approach; Modern Supply Chain Management Approach; Elements in SCM.

UNIT II Demand Management in Supply Chain: Types of Demand, Demand Planning and Forecasting; Operations Management in Supply Chain, Basic Principles of Manufacturing Management.

UNIT III Procurement Management in Agri. Supply chain: Purchasing Cycle, Types of Purchases, Contract/Corporate Farming, Classification of Purchases Goods or Services, Traditional Inventory Management, Material Requirements Planning, Just in Time (JlT), Vendor Managed Inventory (VMI).

UNIT IV Logistics Management: History and Evolution of Logistics; Elements of Logistics; Management; Distribution Management, Distribution Strategies; Pool Distribution; Transportation Management; Fleet Management Service innovation; Warehousing; Packaging for Logistics, Third-Party Logistics; GPS Technology.

UNITV Concept of Information Technology: lT Application in SCM; Advanced Planning and Scheduling; SCM in Electronic Business; Role of Knowledge in SCM; Performance Measurement and Controls in Agri. Supply Chain Management- Benchmarking: introduction, concept and forms of Benchmarking.

Suggested Readings:

Altekar RV. 2006. Supply Chain Management: Concepts and Cases. Prentice Hall of India. Fronczka R, Trent R & Handfield R. 2002. Purchasing and Supply Chain Management. Thomson Asia. van Weefe AJ. 2000. Purchasing and Supply Chain Management Analysis, Planning and Practice. Vikas Publ. House.

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A-305	**ENTREPRENEURSHIP FOR AGRICULTURE**	**100**	**4**	**0**	**0**	**3**

Objective: To expose the learner to the fields of entrepreneurship development focus will be to train the students to develop new projects and encouraging them to start their own ventures.

UNIT- I Entrepreneurship: Definition, concept, characteristics, Classes, Theories of Entrepreneurship - Significance of entrepreneurship in economic development qualities of entrepreneur.

Unit – II Entrepreneurial Process and Structure, Barriers to Enterprise, Sources of Innovative Opportunities, Marketing Research; Business Environment – Micro Environment, Macro Environment, Venture Feasibility – Technical, Marketing, Financial Feasibility, Starting new business or buy firms. Entrepreneurship in Agricultural Sector.

Unit – III Business strategy - concept - long term and short term focus; Business organization; Sources of Finance, Venture capital financing - concept, purpose and schemes, Capital Markets; Government Policies and Regulations for Agribusiness

UNIT- IV Entrepreneurship development programs and role of various institutions in developing entrepreneurship, life cycles of new business, environmental factors affecting success of a new business, reasons for the failure and visible problems for business

Unit – V Business Plan – Sources of Product, Pre-Feasibility Study, Criteria for selection of product, Ownership & Capital; Growth Strategies in business – Market penetration, Market expansion, Product Expansion, Diversification, Acquisition; Steps in Product launch.

Suggested Readings:

1. Dandekar, V. M. and Sharma, V. K., 2016, Agri-Business and Entrepreneurship Development. Manglam Publications, New Delhi.
2. Desai, V., 2006, Entrepreneurship Development, Project formulation, Appraisal & Financing for Small Industry. Himalaya Publications, New Delhi.
3. Hisrich, R. D. and Peters, M. P., 2002, Entrepreneurship, Tata McGraw Hill.
4. Kaplan, J. M. and Warren, A. C., 2013, Patterns of Entrepreneurship Management, John Wiley & Sons; 4th revised edition.

5. Nandan, H., 2007, Fundamentals of Entrepreneurship Management, Prentice Hall

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AGRO BUSINESS

MBA IV SEMESTER

	FOOD PROCESSING MANGEMENT	**1 0 0**	**4**	**0**	**0**	**3**

Objective: To acquaint the students with different food processing techniques and their management.

UNIT I Present status of food industry in India; Organization in food industry; Introduction to operations of food industry; Deteriorative factors and hazards during processing, storage, handling and distribution.

UNIT II Basic principles of food processing and food preservation by manipulation of parameters and factors and application of energy, radiations, chemicals and biotechnological agents; Packaging of foods.

UNIT III Quality Management: TQCM (Total quality control management), control of raw materials, process and finished products, quality standards: BlS, PFA, HACCP, ISO etc", Food plant sanitation.

UNIT IV Analysis of costs in food organization; Risk management- Post Harvest process, losses and management for loss reduction, Management for value addition in food products, Laws and regulations related to food industry and food production and marketing; Quality management - quality standards, PFA, lSO, etc.

UNIT V Case studies on project formulation in various types of food industries - milk and dairy products, cereal milling, oil-seed and pulse milling, sugarcane milling, honey production, baking, confectionery, oil and fat processing, fruits and vegetable storage and handling, processing of fruits and vegetables, egg, poultry, fish and meat handling and processing, etc.

Suggested Readings:

Acharya SS & Aggarwal NL. 2004. Agriculturol Marketing in Indio. Oxford & lBH.
Earfy R. 1995. Guide to Quality Monogement Systems for Food lndustries.

Blackie. Jef en P. 1985. lntroduction to Food Processing. Reston Publishing.

Potly VH & Mulky MJ. 1993. Food Processing. Oxford & lBH

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	DISASTER MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: To introduce learners to the key concepts and practices of natural disaster management; to equip them to conduct thorough assessment of hazards, and risks vulnerability; and capacity building.

UNIT I Natural Disasters- Meaning and nature of natural disasters, their types and effects. Floods, Drought, Cyclone, Earthquakes, Landslides, Avalanches, Volcanic eruptions, Heat and cold Waves, Climatic Change: Global warming, Sea Level rise, Ozone Depletion.

UNIT II Man Made Disasters- Nuclear disasters, chemical disasters, biological disasters, building fire, coal fire, forest fire. Oil fire, air pollution, water pollution, deforestation, Industrial wastewater pollution, road accidents, rail accidents, air accidents, sea accidents.

UNIT III Disaster Management- Efforts to mitigate natural disasters at national and global levels. International Strategy for Disaster reduction.

UNIT IV Concept of disaster management, national disaster management framework; financial arrangements; role of NGOs, Community based organizations, and media.

UNIT V Central, State, District and local Administration; Armed forces in Disaster response; Disaster response: Police and other organizations.

Suggested Readings

Gupta HK. 2003. Disaster Management. Indian National Science Academy. Orient Blackswan.
Hodgkinson PE and Stewart M. 1991. Coping with Catastrophe: A Handbook of Disaster Management. Routledge.
Sharma VK. 2001. Disaster Management. National Centre for Disaster Management, India.

	FOOD RETAIL MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: To assist students in understanding the structure and working of food marketing system in India, to examine how the system affects farmers, consumers and middlemen and to illustrate the response of this dynamic marketing system to technological, socio-cultural, political and economic forces over time.

UNIT I Introduction to International Food market, India‘s Competitive Position in World Food Trade, Foreign Investment in Global Food Industry, Retail management and Food Retailing, The Nature of Change in Retailing, Organized Retailing in India, E-tailing and Understanding food preference of Indian Consumer, Food consumption and Expenditure pattern, Demographic and Psychographic factors affecting Food Pattern of Indian Consumer.

UNIT II Value Chain in Food Retailing, Principal trends in food wholesaling and retailing, food wholesaling, food retailing, the changing nature of food stores, various retailing formats, competition and pricing in food retailing, market implications of new retail developments, value chain and value additions across the chain in food retail, food service marketing.

UNIT III 4 Ps in Food Retail Management, Brand Management in Retailing, Merchandise pricing, Pricing Strategies used in conventional and nonconventional food retailing, Public distribution system, Promotion mix for food retailing, Management of sales promotion and Publicity, Advertisement Strategies for food retailers.

UNIT IV Managing Retail Operations, Managing Retailers‘ Finances, Merchandise buying and handling, Merchandise Pricing, Logistics, procurement of Food products and Handling Transportation of Food Products.

UNIT V Retail Sales Management, Types of Retail Selling, Salesperson selection, Salesperson training, Evaluation and Monitoring, Customer Relationship Management, Managing Human Resources in retailing, Legal and Ethical issues in Retailing.

Suggested Readings

Berman and Evans. 2008. Retail Management: A Strategic Approach. 10th Ed. Prentice Hall of

India.

Cox. 2006. Retailing: An Introduction. 5th Ed. Pearson Edu.

Levy M and Weitz BW. 2004. Retailing Management. 5th Ed. McGraw Hill.

	AGRO TECHNOLOGY MANAGEMENT	**100**	**4**	**0**	**0**	**3**

Objective: To acquaint the students in latest advances in fertilizer technology management.

UNIT I Fertilizer development – concept, scope, need, resource availability; import and export avenues for fertilizer; types of fertilizers, grading and chemical composition, role of fertilizers in agricultural production, production and consumption of fertilizer in India.

UNIT II Raw material needed, technology and use of straight, complex, liquid and suspension fertilizers. Fertilizer use efficiency.

UNIT III Production efficiency and capacity utilization; quality control and legal aspects - fertilizer control order; Fertilizer pricing policy.

UNIT IV Field trials and demonstration. Importance of renewal wastes and their recycling; Scope of biofertilizer; environmental pollution due to fertilizer use.

UNIT V Testing facilities; constraints in fertilizer use and emerging scenario of fertilizer use; assessment of demand and supply of different fertilizers, fertilizer distribution, fertilizer storage.

Suggested Readings

Brady NC and Weil RR. 2002. The Nature and Properties of Soils. 13th Ed. Pearson Edu. Fertilizer Control Order (different years). Fertilizer Association of India, New Delhi.

Fertilizer Statistics (different years). Fertilizer Association of India, New Delhi Indian Journal of Fertilizers (different years).

Fertilizer Association of India, New Delhi. San Chilli V. 1960. Chemistry and Technology of Fertilizers. American Chemical Soc. Monograph Series. Reinhold Publ. Corp.

Tisdale SL, Nelson WL, Beaton JD and Havlin JL. 2002. Soil Fertility and Fertilizers. 5th Ed. Prentice Hall

	ORGANIC FOOD TECHNOLOGY	**100**	**4**	**0**	**0**	**3**

Objective: to acquaint the students with different food processing techniques and their management.

UNIT I Present status of food industry in India; Organization in food industry; Introduction to operations of food industry; Deteriorative factors and hazards during processing, storage, handling and distribution.

UNIT II Basic principles of food processing and food preservation by manipulation of parameters and factors and application of energy, radiations, chemicals and biotechnological agents; Packaging of foods.

UNIT III Quality Management: TQCM (Total quality control management), control of raw materials, process and finished products, quality standards: BlS, PFA, HACCP, ISO etc", Food plant sanitation

UNIT IV Analysis of costs in food organization; Risk management; Laws and regulations related to food industry and food production and marketing; Quality management – quality standards, PFA, ISO, etc.

UNIT V Case studies on project formulation in various types of food industries –milk and dairy products, cereal milling, oil-seed and pulse milling, sugarcane milling, honey production, baking, confectionery, oil and fat processing, fruits and vegetable storage and handling, processing of fruits and vegetables, egg, poultry, fish and meat handling and processing, etc.

Suggested Readings

Acharya SS & Aggarwal NL. 2004. Agricultural Marketing in India. Oxford & IBH.

Early R. 1995. Guide to Quality Management Systems for Food Industries.

Blackie. Jelen P. 1985. Introduction to Food Processing. Reston Publishing.

Potly VH & Mulky MJ. 1993. Food Processing. Oxford & IB

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	STORE KEEPING AND WAREHOUSING MANAGEMENT	**100**	**4**	**0**	**0**	**3**

UNIT I
Objectives of Procurement System, Principles of Procurement, History of procurement function: from administrative to strategic, value added role, Procurement Cycle, Procurement Planning, Purchasing Mix: Six Rights, Selecting the right supplier, Source of information and process, Supplier appraisal/vendor capability, Bidding process.

UNIT-II
Introduction to Warehousing Concepts -Role of warehouse-types of warehouse- warehouse location- Need for warehousing- Supply chain trends affecting warehouse –Warehouse functions- Role of warehouse manager-Warehouse process: e-commerce warehouse- Receiving and put away- Warehouse process – pick up preparation-Receiving - Pre-receipt - In- handling - Preparation - offloading - Checking - Cross-docking - Quality control - Put-away - Pick preparation - Pick area layout – Picking strategies and equipment -order picking methods - Warehouse processes- Replenishment to dispatch- Value adding services - Indirect activities - Stock management - Stock or Inventory counting - Perpetual inventory counts - Security - Returns processing – Dispatch.

UNIT-III
Strorage Management system – Storage Inventory Management – Functions of storage & Inventory - Classification of Inventory- Methods of Controlling Stock Levels- Always Better Control (ABC) Inventory system- Warehouse Management Systems (WMS) - choosing a WMS- the process implementation-cloud computing- Warehouse layout-Data collection-space calculation-aisle width- finding additional space.

UNIT – IV
Storage and Warehousing Information system -Storage Equipment: storage option - shuttle technology - very high bay warehouse - warehouse handling equipment - vertical and horizontal movement - Automated Storage/ Retrieval System (AS/RS)-specialised equipment- Technical advancements- Resourcing a warehouse- warehouse costs- Types of cost - Return on Investment (ROI) - Charging for shared-user warehouse service - Logistics charging methods Warehousing Information System (WIS)- Performance management- outsourcing decisions.

UNIT – V
Material Handling and Warehouse safety Material handling- Product movement- concept- costs- product load activity—dispatch activityunload activity-control device-impact of the computer technologyautomatic identification-issues and trends in product transport—Packaging - Pallet - Stretch wraps - Cartons – Labeling- Health and safety- Risk assessment - Layout and design - Fire safety- Slips and trips – Manual handling - Working at height - Vehicles - Forklift trucks – Warehouse equipment legislation. Warehouse safety check list- Warehouse Environment- Energy production - - Product waste - waste disposal - Hazardous waste- Sustainable warehouse Management.

Text Books:

1. GWYNNE RICHARDS (2014) Warehouse Management: A Complete Guide to Improve Efficiency and Minimizing Cost in the Modern Warehouse. The Chartered Institute of Logistics and Transport, Kegan page limited.
2. DAVID E. MULCHY & JOACHIM SIDON (2008) A Supply Chain Logistics Program for Warehouse Management. Auerbachian Publications

References

1. Bowersox, D.J., Closs, D.J., Cooper, M.B., & Bowersox, J.C. (2013). Supply Chain Logistics Management. (4 th ed.), McGraw Hill/Irwin.
2. Arnold, J.R., Chapman, S.N. (2012). The Introduction to Materials Management. (7 th ed.), Prentice-Hall.
3. Coyle, J.J., Jr. Langley, C.J., Novack, R.A, & Gibson, B.J. (2013). Managing Supply Chains: A Logistics Approach. (9 th ed.), McGrawHill. Edward, F.(2002).
4. World-Class Warehousing and Material Handling. (International ed.), McGraw-Hill.
5. Muller, M. (2011). Essentials of Inventory Management. (2 nd ed.), American Management Association.

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	TRANSPORTATION AND INFRASTRUCTURE MANAGEMENT FOR SCM	**100**	**4**	**0**	**0**	**3**

UNIT I
Basics of Transportation, Transportation Functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; International Air Cargo Transport; Coastal and Ocean transportation, Characteristics of shipping transport- Types of Ships. Containerization: Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; CONCOR; ICDs under CONCOR;

UNIT II
Logistics management and Supply Chain management - Definition, Evolution, Importance. The concepts of logistics and Supply Chain Management, Key Drivers of Supply Chain Management and Logistics relationships. Drivers of Supply Chain Performance : Framework for structuring drivers- Facilities- Inventory- Transportation- Information- Sourcing- Pricing - an over view of Designing distribution network – and overview of Network Design in the Supply Chain - an overview of Network design in Uncertain Environment.

UNIT III
Packing and Packaging: Meaning, Functions and Essentials of Packing and Packaging, Packing for Storage- Overseas Shipment- Inland-Transportation- Product content Protection, Packaging Types: Primary, Secondary and Tertiary- Requirements of Consumer Packaging, Channel Member Packaging and Transport Packaging - Shrink packaging –Identification codes, bar codes, and electronic data interchange (EDI)- Universal Product Code- GS1 Standards- package labels- Symbols used on packages and labels.

UNIT IV
Sourcing and Planning Transportation Networks in Supply Chain: Sourcing decision in supply chain : Role of sourcing – in-house or outsource – Third and Fourth – Party Logistics providers – Supplier scoring and assessment – Transportation in Supply Chain : role- modes- performance characteristics – Logistics - Design options- role of IT- risk – Trade–offs in transportation design.

UNIT V
Special Aspects of Export logistics: Picking, Packing, Vessel Booking [Less-than Container Load(LCL) / Full Container Load (FCL)], Customs, Documentation, Shipment, Delivery to distribution centers, distributors and lastly the retail outlets- Import Logistics: Documents Collection- Valuing- Bonded Warehousing- Customs Formalities- Clearing ,Distribution to Units.

References:

1. 1.Bowersox, Closs, Cooper, Supply Chain Logistics Management, McGraw Hill.
2. Burt, Dobbler, Starling, World Class Supply Management, TMH.
3. Donald J Bowersox, David J Closs, Logistical Management, TMH
4. Pierre David, ‒International Logistics‖, Biztantra.
6. Sunil Chopra, Peter Meindl, Supply Chain Management ,Pearson Education, India.
5. Liu, J., Supply Chain Management and Transport Logistics, Routledge, 2011.
6. Sinha, A. and Kotzab, H., Supply Chain Management: A Managerial Approach, Tata McGraw-Hill Education, 2011.
7. Sople, V.V., Supply Chain Management: Text and Cases, Pearson, 2011.

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	PURCHASING AND MATERIAL MANAGEMENT	100	4	0	0	3

UNIT I
The purchasing and supply process - Introduction to purchasing and SCM - Strategic supply management roles and responsibilities - Improving the procure to pay process - Approval, contract and purchase order preparation - Types of purchases - Purchasing policy and procedures -Policy overview - Purchasing policies Policy defining- Role and conduct of purchasing, Buyer-supplier Relationship, operational issues- Purchasing procedures.

UNIT II
Organizing the purchasing function: Purchase function position within the organization structure, factors affecting purchasing‘s position, reporting of purchasing function, organizing of purchasing, separating operational and strategic purchasing- advantages and disadvantages of centralized- decentralized purchasing, hybrid purchasing structure.

UNIT III
Concept of Integrated Materials Management (IMM) – Organising for IMM – Types of Inventories – Inventory Problems in India. Codification – Computerisation and Information Systems – Standardisation and Variety Reduction – Value Analysis: ABC, VED, XYZ and other methods of Selective Analysis.

UNIT-IV:
Q-Based Inventory System – P-Based Inventory System – S-S based Inventory System – Practical Inventory Models – Inventory Valuation.Purchasing – Source Selection – Vendor Rating – Purchase Budget – Systems – Tenders – Price Negotiations – Forward Buying – Purchasing Capital Equipments – Seasonal Goods – Special Items – Deferred Payment Schemes – Lending Institutions – Global Purchases – Government Buying – EGS & D – Rate Contract – Insurance – Legal Aspects in Purchasing – Evaluation of Purchase Performance.

UNIT-V:
Stores Layouts – Stores Accounting Procedures and Forms – Stock Verification – Practical Problems in Management of Dead Stocks – Surplus and Scraps – Evaluation of Stores Performance – Materials Handing and Transportation Management.

TEXT BOOKS:

1. Parasram, ‒In Coterms Exports Coartind and Pricing with Practical Guide to in Co-Terms, 1st Edition, Jain Book, 6th Edition, 2010.
2. Gopalakrishnan, P & Sundaresan, M: MATERIALS MANAGEMENT – AN INTEGRATED APPROACH; Prentice Hall of Indian Private Ltd.
3. Gopalakrishnan, P & Sandilya, M.S: INVENTORY MANAGEMENT – TEXT AND CASES; The Macmillan Company of India Ltd.

REFERENCES:

1. John Wiley, ‒Global Operations & Logistics:Text & Cases-Dornier‖, Pearson Education, 2nd Edition 2013.
2. David Simchi-Levi, ‒Designing & Managing Supply Chain-Concepts, Strategies‖, Tata-McGraw- Hill, 8th Edition, 2000.
3. Ammer, D.S, MATERIALS MANAGEMENT; Irwin.
4. Datta, A.K: MATERIALS MANAGEMENT – PROCEDURES, TEXT AND CASES; Prentice Hall of India Private Ltd.
5. Gokaran, P.R: ESSENTIALS OF MATERIALS MANAGEMENT; Somaiya Publications.

6. Menon,P.G: MATERIALS MANAGEMENT AND O.R. IN INDIA; M.M.J. Publication.

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	REVERSE LOGISTICS	**100**	**4**	**0**	**0**	**3**

UNIT I

Reverse logistics and forward logistics Commercial logistics and the military Measuring reverse logistics and improvement Best practices of military reverse logistics Management of complex systems and reverse logistics. Successful management principles are successful reverse logistics principles Best practices in retail, apparel, electronics, food, beverage, and sporting goods.

UNIT II

Customer Service Returns RMA and other elements of returns Best practices in customer service and after sales customer support Reverse logistics concerns of the secondary market- Green reverse logistics practices Green buildings that support logistics (LEED Certification) Successful global projects

UNIT III

Explain and describe organizational culture and review how it applies to reserve logistics Review cultural design to support reverse logistics Reduction of risk in the reverse supply chain Securing the supply chain

UNIT IV

Understand reverse logistics for manufacturing Understand reverse logistics for food and beverage operations Understand reverse logistics for warehouse management Understand reverse logistics inventory management Understand reverse logistics as applied to product life cycle management.

UNIT V

Carbon Credits Carbon Footprint Logistics and reverse logistics as applied to carbon footprint What can you do to reduce your carbon footprint - Complexity theory Continuous improvement Lean principles New technologies for reverse logistics Communities and teams Future of revere logistics and supply chain management

Text books:

1. Joseph Sarkis, Yijie Dou. Green Supply Chain Management: A Concise Introduction, Routledge, 2017.
2. Charisios Achillas, Dionysis D. Bochtis, Dimitrios Aidonis, Dimitris Folinas. Green Supply Chain Management, Routledge, 2018.
3. Janat Shah, Supply Chain Management: Text and Cases, 2nd Edition 2017.
4. John Manners-Bell, Logistics and Supply Chains in Emerging Markets, Kogan Page, 2017.

REFERENCE BOOKS:

1. Coyle, John Joseph. (2017). Supply chain management: a logistics perspective. 10th ed. Australia: Cengage Learning. HD 38.5 C69 2017
3. Abbey, J. D., & Guide Jr, V. D. R. (2017). Closed-loop supply chains: a strategic overview Sustainable Supply
4. Hsiao-Fan Wang, Surendra M. Gupta. Green Supply Chain Management: Product Life Cycle Approach, McGraw Hill publishing, 2011

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	SUPPLY CHAIN RISK MANAGEMENT	100	4	0	0	3

UNIT I

Basics of Risk Management: Risk and Management-Growth of risk Management-definingRisk--Features of Risk. Decisions and Risk- Decisions with Certainity-Uncertainity-risk- ignorance-Managing risk.

UNIT II

Risks in Supply Chain: Risks arising out of Trends affecting Supply Chain-Integration-Cost Reduction-Agile Logistics-E Business- Globalization,Outsourcing-Supply chain risk management-Aims steps and Principles. Trends in Supply Chain Management. Integration of supply Chains, Cost Reduction, Agile logistics, E – Business, Globalization, Outsourcing, Changing practices in Logistics. Approaches to Risk Management.

UNIT III

Identifying and Analysing Risks: Types of Risks-Identifying Risks-Tools for analyzing past events-Collecting opinions—analyzing operations—Measuring Risk—Likelihood of a risky event-Consequences of risk—Responding to Risks—Alternative Responses—Defining the options and choosing the best response—Network view of risk—Shared risks.

UNIT IV

Creating Resilient Supply Chains: Designing of a Resilient Supply Chain—Principles of designing resilient Supply Chain—Physical features of a resilient supply chain—Relationship within a resilient supply chain—Risk compensation and Business Continuity. Risk and Management - Risk in the Supply Chain, Features of Risk, Decisions &Risk, Structure of Decisions, Decisions with uncertainty, Risk, ignorance, Managing Risk Structure of a Supply Chain, Increasing Risk.

UNIT V

Identifying Risks – Types of Risks, Tools for analyzing past events, Operations, Problems with Risk Identification, Measuring Risk, Consequences of Risk, Responding to Risk – Alternative responses, Defining Options, Choosing the best response, Implementation & Activation, A Network view of Risk – Shared Risks, Achieving an Integrated approach, Analyzing & responding to risks. Business Continuity Management: Emergencies and Crisis—Views of BCM and steps in BCM

Text Books:

1. Supply Chain Risk Management by Donald Walters,Kogan Page First Edition
2. 2.The New Supply Chain Challenge Risk Management in a Global Economy by Bosman R,FM Global,Johnson RI 2006
3. Gregory L. Schlegel , Robert J. Trent Supply Chain Risk Management: An Emerging Discipline (Resource Management) Hardcover – Import, 3 Nov 2014.
4. Donald Waters – Supply Chain Risk Management, Published by the Chartered Institute of Logistics & Transport, U.K
5. Jeremy F.Shapiro, Modelling the Supply Chain, Duxbury.

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	ENTERPRISE RESOURCE PLANNING	**100**	**4**	**0**	**0**	**3**

UNIT I

Introduction to Enterprise resource planning (ERP), Evolution of ERP, Reasons for the growth of ERP, Scenario and Justification of ERP in India, Evaluation of ERP, Various Modules of ERP, Advantage of ERP - MRP – problems of systems islands – need for system integration and interface.

UNIT II

An overview of Enterprise: Integrated modules, Business Process Mapping for ERP Module Design, Organizational Environment and its selection for ERP Implementation. ERP – Packages – products and market opportunities – problems of ERP selection and implementation – identifying ERP benefits.

UNIT III

ERP and Related Technologies: ERP and Related Technologies, Business Process Reengineering (BPR), Management Information System (MIS), Executive Information System (EIS), Decision support System (DSS), Supply Chain Management (SCM). ERP process – implementation – managing changes in IT organisations – preparing IT infrastructure – measuring benefits of ERP. Modules of ERP.

UNIT IV

ERP Modules: ERP Modules, Introduction, Finance, Plant Maintenance, Quality Management, Materials Management, ERP Market. A Comparative Assessment and Selection of ERP Packages and Modules.

UNIT V

ERP implementation lifecycle, issues in implementing ERP packages, pre-evaluation screening, package evaluation, project planning phase, gap analysis, reengineering, configuration, implementation, team training, testing, going live, end-user training, post implementation (Maintenance mode).

Text Books:

1. Alexis Leon, ERP demystified, second Edition Tata McGraw-Hill, 2007.
2. Jagan Nathan Vaman, ERP in Practice, Tata McGraw-Hill, 2008.
3. Hammer, Michael – Reengineering the corporation.
4. E-commerce strategy, technologies and applications by David Whitley.

Reference books:

1. Alexis Leon, Enterprise Resource Planning, second edition, Tata McGraw-Hill, 2008.
2. Mahadeo Jaiswal and Ganesh Vanapalli, ERP Macmillan India, 2009.
3. Vinod Kumar Grag and N.K. Venkitakrishnan, ERP- Concepts and Practice, Prentice Hall of India,2 nd edition, 2006.
4. Summer, ERP, Pearson Education, 2008.

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	INTERNATIONAL LOGISTICS MANAGEMENT	**100**	**4**	**0**	**0**	**3**

UNIT I

International Trade: Need and Importance – Recent Trends in World Trade – Leading players – India's Foreign Trade – Commodity Composition and Destination - Overview of International Logistics- Components, Importance, Objectives; Logistic Subsystem;- Integrated Logistics; - Barrier to Internal Integration – Logistics Documents for International Trade.

UNIT II

Marketing and Logistics Customer Focused Marketing; International Marketing: International Marketing Channel: Role of Clearing Agent, Various Modes of Transport, Choice and Issues for Each Mode, Transport Cost Characteristics

UNIT III

Basics of Transportation Transportation Functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; Legal Classifications; International Air Transport; Air Cargo Tariff Structure; Freight: Definition, Rate; Freight Structure and Practice

UNIT IV

Containerization and Chartering Containerization: Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; CONCOR; ICDs under CONCOR; Chartering: Kinds of Charter, Charter Party, and Arbitration.

UNIT V

Inventory Management and Packaging Inventory Management: Introduction, Characteristics, Functionality, Components, Planning; Packaging and Packing: Labels, Functions of Packaging, Designs, Kinds of Packaging; Packing for Transportation and Marking: Types of Boxes, Container, Procedure, Cost, Types of Marking, Features of Marking -Dynamic Component for Continuous Internal Assessment only: Contemporary Developments Related to the Course during the Semester concerned.

References:

1. International Marketing by SakOnkvisit& John J. Shaw, Publisher: Prentice Hall of India
2. International Marketing by Gupta and Varshing, Publisher: Sultan Chand and Sons
3. Logistic Management and World Sea Borne Trade by MultiahKrishnaveni, Publisher: Himalaya Publication
4. Logistic and Supply Chain Management by Donald J. Bowerson, Publisher: Prentice Hall of India

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	LEAN SUPPLY CHAIN MANAGEMENT	100	4	0	0	3

UNIT I:

Lean Manufacturing: Principle And Tools : Evolution of Just-In-Time and Lean Manufacturing – Principle – Seven wastes – Just-In-Time (JIT) – One-Piece or Continuous Flow – Kanban or Pull System – Basic tools such as 5S, Kaizen, PokaYoke and Single-Minute Exchange of Dies (SMED). -- Lean Manufacturing--Fit into Operations Strategy-- Mapping for supply chain management-- Lean thinking and supply chain management.

UNIT II:

Technique: Value Stream Mapping: Value Stream Mapping (VSM) – Material and Information Flow – VSM symbols – Identification of Product or Product Family – Current-State Mapping – Future-State Mapping by key questions – Plan and Implementation.

UNIT III:

SIX SIGMA: Evolution – TQM vs. Six Sigma – What is Six Sigma – Six Sigma methodologies Such as DMAIC, DFSS – Six Sigma Belts. LEAN SIX SIGMA: The Synergy of Six Sigma and Lean – Lean Six Sigma – Principle – Lean tools in DMAIC – Implementation of Lean Six Sigma.

UNIT IV

DMAIC: TOOLS -- Define – Measure – Analyze – Improve – Control – SIPOC model – VOC – CTQ – Seven Quality or SPC tools such as Pareto Analysis, Cause and Effect Diagram, Control Charts etc. – Process Capability Analysis such as Cp, Cpk – Design of Experiments (DoE).

UNIT V :

Supply Chain Processes and Strategies: Integrated supply chains design - Customer relationship process - Order fulfillment process - Supplier relationship process - Supply chain strategies - Strategic focus - Mass customization - Lean supply chains - Outsourcing and offshoring - Virtual supply chains

References:

1. Feld, W. M., Lean Manufacturing tools, Techniques and How to Use Them, St. Lucie Press, Florida, 2000.
2. Michael L. George, et al., The Lean Six Sigma Pocket tool book: A Quick REFERENCES Guide Nearly 100 tools for Improving Process Quality, Speed, and Complexity, McGrawHill, 2005
3. Rother, M. and Shook, J., Learning see: Value strean mapping create value and eliminate muda, The lean enterprises institute Brookline, Massachusetts, USA, 1999.
4. Liker, J., The yota Way: 14 Management Principles from the World's Greatest Manufacturer, McGraw-Hill Education, 2004.
5. Pyzdek, T. and Keller, P. A., The Six Sigma Handbook, Fourth Edition, McGraw-Hill Professional, 2014.

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	SHIPPING AND MARITIME LAW	100	4	0	0	3

UNIT I

Shipping Features, Types and Terminology- Features, Advantages and Disadvantages of using sea mode, Classification of ships, Shipping Methods, S wage in Ship, Major Sea-routes around the world, Important Terminology, Freight, Parties and Perils Associated with Sea Mode- Parties involved in sea mode of transportation- Ocean Freight- Types of Sea Freight, Calculation of Freight; Maritime Risks, Marine Insurance.

UNIT II

Nature of Admiralty Law: Admiralty Law in relation to public and private international law – admiralty law as a part of mercantile law – admiralty law in relation to common law and civil law –Common law of sea – Sources of maritime law and admiralty law. History of admiralty law in England, other parts of the world and in India – History of admiralty jurisdiction of High Courts of India – admiralty courts – immunity of Government ships.

UNIT III

Admiralty and maritime jurisdiction (scope and extent) – Enforcement of maritime claims by actions in rem and in personam – juridical personality of the ship – maritime liens and priorities. Jurisdiction in matters of collision – Extra territorial jurisdiction – Changing concept of maritime frontiers. International waters; Territorial Waters; Contiguous Zone; EEZ; Continental shelf; High seas; International straits; archipelagoes; Conservation and exploitation of maritime sources; International fisheries -Sea as a common heritage of mankind – Role of IMO – Piracy and hot pursuits.

UNIT IV

The ship as property – ownership – registration – flag of convenience – ship construction rules – acquisition of ships – transfer of ships –negotiation and contract – terms of contract – inspection by buyer – ship mortgages – ship‘s sale and purchase– ISM and issues of safety.

UNIT V

Safety & security regulations at sea and in port, accidents, collisions, salvage, towage – The laws of harbours and pilot age – Jurisdiction in maritime ports; Access to maritime ports; Indian law – The maritime zones Act 1976; civil and criminal jurisdiction over ships; Ship owner‘s liabilities for damage to ports – Limitation of ship owner‘s liability.

References:

1. Aleka Mandaraka – Sheppard – Modern Maritime Law (Second Edition)(2009)
2. D.C. Jackson, Enforcement of Maritime Claims, London: LLP (2005)
3. Southampton on Shipping Law, Informa (2008)
4. Halsbury‘s Laws of England, 4th Edn, London (1983)
5. Marsden, Collisions at Sea, London (1961)
6. Francis D. Rose, The Modern Law of Pilotage, London 91984)
7. Geoffrey Brice, Maritime Law of Salvage, London (1983)
8. Chorly and Giles, Shipping Law, 6th Edn. London
9. Kochu Thommen, International Legislation on Shipping, U.N. New York (1968).
10. Samareshwar Mahanty, Maritime Jurisdiction and Admiralty Law in India, Universal Publishing (2009)

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	GREEN SUPPLY CHAIN MANAGEMENT	100	4	0	0	3

UNIT I
Introduction – Traditional Supply Chain and Green Supply Chain – Environmental Concern and Supply Chain – Closed-loop Supply Chain – Corporate Environmental Management – Green Supply Chain (GSCM): Definition, Basic Concepts – GSCM Practices

UNIT II
ECO-DESIGN : Design for the Environment (DFE) or Eco-Design – Eco-Design and Supplier Relationships – Definitions of Eco-Design – Tools of Product Eco-Design – Involving suppliers in product ecodesign: Drivers, Challenges and Successful factors

UNIT III
Green Purchasing: Green Procurement and Purchasing – Definitions of green purchasing – Drivers of green purchasing – Green purchasing strategies – Green purchasing performance measurement –Green Supplier Development and Collaboration.

UNIT IV
Green Manufacturing: Green Manufacturing or Production: Evolution, Definitions – 4Re‘s: recycling, remanufacturing, reuse and reduction – Closed-loop Manufacturing – ISO 14000 systems – Life Cycle Analysis (LCA) – Lean Manufacturing for Green Manufacturing or Production.

UNIT V
Green Logistics And Transportation: Green Logistics and Transportation – Definitions of Green Logistics – Critical drivers of Green Logistics – Green transportation and logistics practices – Environmental impacts of transportation and logistics – Closing the Loop: Reverse Logistics.

Text books:

1. Joseph Sarkis, Yijie Dou. Green Supply Chain Management: A Concise Introduction, Routledge, 2017.
2. Charisios Achillas, Dionysis D. Bochtis, Dimitrios Aidonis, Dimitris Folinas. Green Supply Chain Management, Routledge, 2018.

Reference books:

1. Hsiao-Fan Wang, Surendra M. Gupta. Green Supply Chain Management: Product Life Cycle Approach, McGraw Hill publishing, 2011
2. Stuart Emmett, Vivek Sood. Green Supply Chains: An Action Manifes by Stuart Emmett, Wiley publications, 2010

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	ESSENTIAL OF BUSINESS ANALYTICS	100	4	0	0	3

COURSE OBJECTIVES This course helps the students to understand and analyze basic essentials of business analytics business framework. They shall be exposed to fundamental statistical techniques to solve real life problems and enable them to take better decisions.

Unit I:

Introduction to Business Analytics, Types of data, Integrating Analytics with business, Business Analytics for Competitive Advantage, Descriptive, Predictive, and Prescriptive Analytics, Dashboards History; Subdivisions within Statistics; Data collection, Editing, Classification, Tabulation, Diagrammatic and Graphical representation of data.

Unit II:

Measures of Central tendency and Dispersion: Arithmetic Mean, Geometric Mean, Harmonic Mean, Median, Mode, Mean Deviation, Quartile Deviation, Standard Deviation, Skewness, Kurtosis and Moments.

Unit III:

Probability and Probability Distributions: Introduction to Probability, Probability Rules, Probabilities under Conditions of Statistical Independence, Probabilities under Conditions of Statistical Dependence, Revising Prior Estimates of Probabilities, Bayes‘ Theorem, Random Variables, Use of Expected Value in Decision Making, Binomial Distribution, Poisson Distribution, Normal Distribution.

Unit IV:

Sampling and Estimation: Random Sampling, Introduction to Sampling Distributions, Relationship Between Sample Size and Standard Error, Point Estimates, Interval Estimates, Confidence Intervals, Calculating Interval Estimates of the Mean from Large Samples.

Unit V:

Testing of Hypotheses: Hypothesis, Steps in Hypothesis Testing, Measuring the Power of a Hypothesis Test, Hypothesis Testing of Means and Proportions, Hypothesis Testing for Differences between Means and Proportions, Analysis of Variance, One way ANOVA and Two way ANOVA, Non-parametric tests: Chi-Square Test, The Sign Test for Paired Data, The MannWhitney U Test, Kruskal-Wallis Test, The Kolmogorov-Smirnov test. Unit 6: Correlation, Regression and Time Series: Correlation, Product moment correlation, Rank correlation, Bi-variate correlation, Regression, Simple linear Regression, Line of best fit, Time Series, Trend Analysis, Cyclical Variation, Seasonal Variation, Irregular Variation, Time Series Analysis in Forecasting.

References:

1. Richard I. Levin & David S.Rubin, Statistics for Management, PHI.1999, New Delhi.
2. Kishor S. Trivedi, Probability and Statistics with Reliability, Queuing and Computer Science Applications, John Wiley & Sons, Singapore, 2002.
3. John E.Freund & Ronald E. Walpole, Mathematical statistics, PH, New Jersey, 1980.
4. E.L.Lehmann, Testing Statistical Hypotheses, John Wiley & Sons, New York, 1986.
5. S.P. Gupta, Statistical Methods, Sultan Chand &Sons, New Delhi 1998.
6. Sundar Rao P.S.S, Richard J, Introduction to biostatistics – A manual for students in Health Sciences, PHI Learning Pvt. Ltd. 1996, New Delhi.
7. Susan Miltan , Statistical methods in the Biological and Health Sciences,1999, McGraw-Hill
8. B. Burt Gerstman, Basic Biostatistics: Statistics for Public Health Practice, Jones & Bartlett Learning, 2008.
9. Wayne W. Danial, John Wiley, Biostatistics: A Foundation for analysis in the Health Sciences

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	Text, Social Media& Web Analytics	**100**	**4**	**0**	**0**	**3**

UNIT I:

Text Analytics: Text Analytical Approach and Tools to Analyze Data: Analytical Approaches-- History of Analytical Tools-- Introducing Popular Analytical Tools-- Comparing Various Analytical Tools. Text mining –unstructured text, episode rule discovery for texts, hierarchy of categories, text clustering.

UNIT II:

Social Media Analytics: Introduction to Semantic Web: Limitations of current Web-- Development of Semantic Web-- Emergence of the Social Web. Social Network analysis: Development of Social Network Analysis -Key concepts and measures in network analysis. Electronic sources for network analysis: Electronic discussion networks- Blogs and online communities - Web-based networks.

UNIT III

Knowledge representation on the Semantic web: Ontology and their role in the Semantic Web: Ontology-based knowledge Representation – Ontology languages for the Semantic Web: Resource Description Framework - Web Ontology Language. Modelling and aggregating social network data: State-of-the-art in network data representation - Ontological representation of social individuals - Ontological representation of social relationships - Aggregating and reasoning with social network data. Social-semantic applications: Generic Architecture- Sesame-Elmo – Graph util, Flink-Open academia. Social network extraction: Survey method-electronic data extraction- Data collection Optimiztionprediction- Evaluation.

UNIT IV:

Understanding web analytics: The foundations of Web analytics: Techniques and Technologies – Present and Future of Web analytics.---Data Collection: Importance and Options –Web server log files: Click stream data – User submitted information – Web server performance data – Page tags –First and third party tracking - Web Analytics Strategy: Key performance indicators – Web analytics process – Heuristics evaluations – Site visits – Surveys – Measuring reach – Measuring acquisition – Measuring conversion – Measuring retention – Security and privacy implications of Web analytics.

UNIT V:

Web Analytics Tools: Content organization tools – Process measurement tools – Visitor segmentation tools – Campaign analysis tools – Commerce measurement tools – Google analytics – Omniture – Web trends – Yahoo! Web analytics. Google Analytics: Key features and capabilities – Quantitative and qualitative data - Working of Google analytics – Privacy - Tracking visitor clicks, Outbound links and Non HTML files.

Reference Books:

1. Bernard J. Jansen, ―Understanding User-Web Interactions via Web analytics‖, Morgan and Claypool, 2009.
2. Avinash Kaushik, ―Web Analytics2.0‖, John Wiley and Sons, 2010.
3. Brian Clifton, ―Advanced web metrics with Google analytics‖, John Wiley and Sons, 2012.
4. Justin Cutroni, ―Google Analytics‖, O‟Reilly, 2015.
5. Jerri L. Ledford, Joe Teixeira and Mary E. Tyler, ―Google Analytics‖, John Wiley and Sons, 2013.
6. Charu C. Aggarwal and ChengXiang Zhai, Mining Text Data. Springer, 2012.
7. Dan Jurafsky and James H Martin,Speech & Language Processing. Pearson Education India, 2000.
8. Guandong Xu, Yanchun Zhang and Lin Li, Web Mining and Social Networking – Techniques and applications, First Edition, Springer, 2011.
9. Dion Goh and Schubert Foo - Social information Retrieval Systems: Emerging Technologies and Applications for Searching the Web Effectively, IGI Global Snippet, 2008.
10. Max Chevalier, Christine Julien and Chantal Soulé-Dupuy, Collaborative and Social

Information Retrieval and Access: Techniques for Improved user Modelling, IGI Global Snippet, 2009.

11. John G. Breslin, Alexander Passant and Stefan Decker, -The Social Semantic Web, Springer, 2009.

	PREDICTIVE ANALYTICS	**100**	**4**	**0**	**0**	**3**

Course Objective: This course will enable students to apply specific statistical and regression analysis methods applicable to predictive analytics to identify new trends and patterns, uncover relationships, create forecasts and to develop and use various quantitative and classification predictive models based on various regression and models.

Unit I

Linear Regression: Coefficient of determination-- Significance test, Residual analysis - Standard Error - Ratio of variance- Galton Graph – Ratio of Regression – Interpretation of Galton‘s Graph - Confidence and Prediction intervals.

Unit II

Multiple Linear Regression: Coefficient of determination--Interpretation of regression coefficients-- Categorical variables— heteroscedasticity - Multi-co linearity outliers-- Auto regression and Transformation of variables—Regression--Model Building.

Unit III

Logistic And Multinomial Regression: Logistic function-- Estimation of probability using Logistic regression, Variance-- Wald Test-- Hosmer Lemshow Test-- Classification Table-- Gini Co-efficient.

Unit IV

Forecasting: Moving average-- Exponential Smoothing-- Casual Models. Time Series Analysis-- Moving Average Models-- ARIMA models-- Multivariate Models.

Unit V

Index numbers: construction of Index numbers – selection of items- selection of base – selection of average and system of weighting – construction of various types of index numbers. Theory of probability ad sampling: statistical probability – the Laws of probability – permutations and combinations.

Reference Books:

1. Anderson, Sweeney and Williams ‒Statistics for business and economics‖, Cengage Learning, 2011.
2. Richard I. Levin. David S. Rubin, ―Statistics for Management‖, Pearson Education, 2012.
3. Richard A. Johnson, Irwin Miller and John Freund, ‒Probability and Statistics for Engineers‖, Pearson Education, 2014.
4. Ronald E. Walpole, Raymond H. Meyers, Sharon L. Meyers, ‒Probability and Statistics for Engineers and Scientists‖, Pearson Education.
5. Asthana B.N., ‒Elements of Statistics‖ Chaitanya publishing house, Allahabad.

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	BIG DATA ANALYTICS	100	4	0	0	3

COURSE OBJECTIVES : • Understand the Big Data Platform and its Use cases • Provide an overview of Apache Hadoop • Provide HDFS Concepts and Interfacing with HDFS • Understand Map Reduce Jobs • Provide hands on Hodoop Eco System • Apply analytics on Structured, Unstructured Data. • Exposure to Data Analytics with R.

Unit I

Introduction to Big Data: Big Data-definition, Characteristics of Big Data (Volume, Variety,Velocity, Veracity, Validity), Importance of Big Data , Patterns for Big Data Development, Data in the Warehouse and Data in Hadoop [Zikopoulos] - Introduction to Hadoop**:** Hadoop- definition, Understanding distributed systems and Hadoop,Comparing SQL databases and Hadoop, Understanding MapReduce, Counting words with Hadoop—running your first program, History of Hadoop, Starting Hadoop - The building blocks of Hadoop, NameNode, DataNode, Secondary NameNode, JobTracker and Task Tracker.

Unit II

HDFS: Components of Hadoop -Working with files in HDFS, Anatomy of a MapReduceprogram, Reading and writing the Hadoop Distributed File system -The Design of HDFS, HDFS Concepts, The Command-Line Interface, Hadoop Filesystem, The Java Interface, Data Flow, Parallel Copying with distcp, Hadoop Archives. Hadoop I/O: Compression—Serialization-- Avro and File-Based Data structures.

Unit III

MapReduce Programming: Writing basic Map Reduce programs - Getting the patent data set,constructing the basic template of a Map Reduce program, Counting things, Adapting for Hadoop‘s API changes, Streaming in Hadoop. MapReduce Advanced Programming: Advanced MapReduce - Chaining Map Reduce jobs,joining data from different sources.

Unit IV

Hadoop Eco System --User Defined Functions-- Data Processing operators. Hive : Hive Shell--Hive Services-- Hive Metastore-- Comparison with Traditional Databases—HiveQL-- Tables, Querying Data and User Defined Functions. Hbase : HBasics—Concepts—Clients—Example--Hbase Versus RDBMS. Big SQL : Introduction

Unit V

Graph Representation in MapReduce: Modeling data and solving problems with graphs,Shortest Path Algorithm, Friends-of-Friends Algorithm, PageRank Algorithm, BloomFilters. Data Analytics with R Machine Learning : Introduction, Supervised Learning, Unsupervised Learning, Collaborative Filtering. Big Data Analytics with BigR.

References

13. Tom White ― Hadoop: The Definitive Guide‖ Third Edit on, O‘reily Media, 2012.
14. Seema Acharya, Subhasini Chellappan, "Big Data Analytics" Wiley 2015.
15. Michael Berthold, David J. Hand, "Intelligent Data Analysis‖, Springer, 2007.
16. Jay Liebowitz, ―Big Data and Business Analytics‖ Auerbach Publications, CRC press (2013)
17. Tom Plunkett, Mark Hornick, ―Using R to Unlock the Value of Big Data: Big Data Analytics with Oracle R Enterprise and Oracle R Connector for Hadoop‖, McGraw-Hill/Osborne Media (2013), Oracle press.
18. Anand Rajaraman and Jef rey David Ulman, ―Mining of Massive Datasets‖, Cambridge

University Press, 2012.

19. Bill Franks, –Taming the Big Data Tidal Wave: Finding Opportunities in Huge Data Streams with Advanced Analytics‖, John Wiley & sons, 2012.
20. Glen J. Myat, ―Making Sense of Data‖, John Wiley & Sons, 2007
21. Pete Warden, –Big Data Glossary‖, O'Reily, 2011.
22. Michael Mineli, Michele Chambers, Ambiga Dhiraj, "Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses", Wiley Publications, 2013.
23. ArvindSathi, –BigDataAnalytics: Disruptive Technologies for Changing the Game‖, MC Press, 2012
24. Paul Zikopoulos ,Dirk DeRoos , Krishnan Parasuraman , Thomas Deutsch , James Giles , David Corigan , "Harness the Power of Big Data The IBM Big Data Platform ", Tata McGraw Hill Publications, 2012.

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	MARKETING ANALYTICS	100	4	0	0	3

Course Objective:
This course aims to provide knowledge on elements of market analysis and to use marketing analytics to predict outcomes and systematically allocate resources.

Unit I:
Introduction: Marketing Analytics, Models and metrics- Market Insight – Market data sources, sizing, PESTLE trend analysis, and Porter five forces analysis – Market segment identification and positioning.

Unit II:
Competitive Analysis And Business Strategy: Competitor identification, Intelligence gathering, analysis and strategy- Analytics based strategy selection, with strategic models and metrics, Forecasting, balanced scorecard, and critical success factors.

Unit III:
Product, Service and Price Analytics: Conjoint analysis model, decision tree model, portfolio resource allocation, Pricing techniques, pricing assessment, pricing for business markets, price discrimination.

Unit IV:
Distribution And Promotion Analytics: Retail location selection, distribution channel evaluation, and multi-channel distribution, Promotion budget estimation and allocation, promotion metrics for traditional media and social media.

Unit V:
Market basket Analysis, Text Analytics, Spreadsheet Modelling - Sales Analytics: E Commerce sales mode, sales metrics, profitability metrics and support metrics.

Reference Books

1. Stephan Sorger, ―Marketing Analytics – Strategic Models and Metrics‖, Admiral Press, 2013.
2. Mark Jeffery, ―Data Driven Marketing: The 15 Metrics Everyone in Marketing should know‖, Wiley, 2013.
3. Paul W. Farris, Neil T. Bendle, Phillip E. Pfeifer, David J. Reibstein ―Marketing Metrics: The Definitive Guide to Measuring Marketing Performance‖, Pearson FT press, 2012.

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	FINANCIAL ANALYTICS	**100**	**4**	**0**	**0**	**3**

UNIT -I

Financial analytics: Concept and Practices- Data science - What is R and its application - Language features: functions-- Assignment-- Aruguments and types. Financial Statistics: Concept and mathematical expectation - Probability - Mean; SD and Variance - Skewness and Kurtosis - Covariance and correlation - Capital Asset Pricing model.

UNIT –II

Financial Securities : Bond and Stock investments - Housing and Euro crisis - Securities Datasets and Visualization - Plotting multiple series. Time Series and Sharpe ratio: Examining and Stationary - Auto Regressive and integrated moving average Processes-- Time periods and Annualizing - Ranking investment candidates - Sharpe Ratio for Income Statement growth.

UNIT –III

Markowitz means - variance optimization - Optimal Portfolio of two risky assets - Data mining with Portfolio optimization- Cluster Analysis - K -means Clustering and Algorithm - Covariance and Precision matrices - Usage of Regression.

UNIT -IV

Ganging the market Sentiment: Mark ov Regime Switching model - Bayesian reasoning - Beta distribution. Stimulating Trading Strategies: Foreign exchange markets - Chart analytics - Initialization and finalization - Bayesian Reasoning within Positions. Black - Scholes model and option - Implied volatility: Black - Scholes model: Concept and applications - Derivation - Algorithm for - Implied volatility.

UNIT -V

Prediction using fundamentals and binomial model for options: Best income statement Portfolio - obtaining Price Statistics - combining the income statement with Price statistics - Prediction using classification trees and Recursive Partitioning. Applying Computational finance - risk Neutral Pricing and No Arbitrage - High Risk - Free Rate Environment

Reference Books

Financial Analytics with R _ Mark J. Bennets, Cambridge University Press.

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	HR ANALYTICS	**100**	**4**	**0**	**0**	**3**

Unit I

HR Analytics in Perspective: Role of Analytics, Defining HR Analytics, HR Analytics: The Third Wave for HR value creation, HR Measurement journey in tune with HR maturity journey Understanding the organizational system (Lean) , Locating the HR challenge in the system , Valuing HR Analytics in the organizational system, Typical problems. Case Studies

Unit II

HRA Frameworks: Current approaches to measuring HR and reporting value from HR contributions, Strategic HR Metrics versus Benchmarking, HR Scorecards & Workforce Scorecards and how they are different from HR Analytics, HR Maturity Framework: From level 1 to level 5, HR Analytics Frameworks: (a) LAMP framework; (b) HCM:21 Framework and (c) Talentship Framework, 5 overarching components of an effective Analytics framework.

Unit III

Basics of HR Analytics: Basics of HR Analytics, what is Analytics, Evolution, Analytical capabilities, Analytic value chain, Analytical Model, Typical application of HR analytics. **Insight into Data Driven HRA:** Typical data sources, Typical questions faced (survey), Typical data issues, Connecting HR Analytics to business benefit (case studies), Techniques for establishing questions, Building support and interest, Obtaining data, Cleaning data (exercise), Supplementing data.

Unit IV

HR Matrics: Defining metrics, Demographics, data sources and requirements, Types of data, tying data sets together, Difficulties in obtaining data, ethics of measurement and evaluation. Human capital analytics continuum. **HR Dashboards:**Statistical software used for HR analytics: MS-Excel, IBM- SPSS, IBMAMOS, SAS, and R programming and data visualisation tools such as Tableau, Ploty, Click view and Fusion Charts.

Unit V

HR Scorecard: Assessing HR Program, engagement and Turnover, Finding money in Analytics, Linking HR Data to operational performance, HR Data and stock performance. Creating HR Scorecard, develop an HR measurement system, guidelines for implementing a HR Scorecard.

References

1. Moore, McCabe, Duckworth, and Alwan. The Practice of Business Statistics: Using Data for Decisions, Second Edition, New York: W.H.Freeman, 2008.
2. Predictive analytics for Human Resources, Jac Fitz- enz, John R. Mattox, II, Wiley, 2014.
3. Human Capital Analytics: Gene Pease Boyce Byerly, Jac Fitz-enz, Wiley,2013.
4. The HR Scorecard: Linking People, Strategy, and Performance, by Brian E. Becker, Mark A. Huselid, Mark A Huselid, David Ulrich, 2001.
5. HR Analytics: The What, Why and How, by Tracey Smith
6. The New HR Analytics: Predicting the Economic Value of Your Company's Human By Jac FITZ-ENZ, 2010.

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	ECONOMETRICS AND BUSINESS FORECASTING	100	4	0	0	3

Unit I

Introduction: Broad classification of economic relations-- stochastic and non-stochastic relations-- econometrics versus mathematical economics-- econometrics versus statistics-- concepts of econometric and mathematical models and their essential ingredients-- functions of econometrics-- essential steps of an empirical study.

Unit II

The simple linear regression model: ordinary least squares (OLS) estimators and their properties-- goodness of fit and tests of hypotheses-- effect of changing scale and units of measurement of variables. - testing of hypotheses-- testing individual coefficients-- testing several coefficients jointly-- testing linear combination of coefficients-- computing R2 -- R2 and F-statistic when there is no intercept term-- effect of omitting intercept term-- effect of inclusion of irrelevant and exclusion of relevant variable in the model.

Unit III

Stationary time series models: stochastic difference equation models-- ARMA models—stationarity-- the autocorrelation function-- the partial autocorrelation function-- sample autocorrelations of stationary series-- Box-Jenkins model selection-- and seasonality.-- Modeling Economic Time Series: Trends and Volatility-- ARCH process-- GARCH model-- ARCH-M model-- Testing for Trends and Unit Roots: Unit root processes, Dicky-Fuller tests, Augmented Dicky-Fuller test, Phillips Perron test. Introduction to VAR model-- estimation and identification-- the Impulse response function-- structural VAR-- Co-integration and Error Correction Models-- Testing for co-integration-- The Engle Granger methodology-- Johansen methodology-- ARDL bounds-testing approach.

Unit IV

First Generation Forecasting Model – The Deterministic Trend/Deterministic Seasonal (DTDS) Model A. The Simple Trend Model – A Deterministic Trend -- Trend Model with Seasonal Dummies -- DTDS plus Autocorrelated Errors -- Tests for Trend and Seasonality – F-tests . Some Important Concepts Leading up to Box-Jenkins Modeling -- Mean, Variance, and Autocorrelation in Time Series --- Definition of Covariance Stationarity -- Example of a Stationary Time Series: the AR(1) model

i. AR(1) Time Series Model $yytt = \emptyset 0 + \emptyset 1 yytt{-}1 + aatt$ when $|\emptyset 1| < 1$
ii. Mean, Variance, Autocovariance, and Autocorrelation
iii. The Special Case of $\emptyset 1 = 1$. The Random Walk model.
iv. The Random Walk Model in not Stationary
v. Differing Prediction Profiles for the two cases: $|\emptyset 1| < 1$ versus $\emptyset 1 = 1$
vi. Do Stock Prices follow a Random Walk?

Unit V

Box Jenkins Models for Stationary-- Non-Seasonal Time Series -- Some Simple Box-Jenkins Models and Their Properties i. ARMA(0,0) ii. MA(1) iii. AR(1) iv. ARMA(1,1) v. General Notation vi. Concepts of Stationarity and Invertibility-- Identification Tools -- Autocorrelation Function (ACF) --Partial Autocorrelation Function (PACF) -- Pattern Table -- Sample Counterparts -- Information Criteria -- P/Q Box -- Box-Jenkins Models – Forecasting for Stationary, Non-Seasonal Time Series-- Box-Jenkins Models for Non-Seasonal, Stochastically-Trending Time Series - The Transfer Function Model --- The Equal-Lag Length Vector Autoregressive Model -- System-Wide Goodness of Fit Measures to Help Choose the Lag-Length E. Using Out-of-Sample Forecasting Experiments to Detect Useful ―Extra‖ Variables for use in Forecasting a Variable of Interest -- Diebold-Mariano Test for Significant Differences in

Forecasting Accuracies-- Combination Forecasting --Some Basic Theorems on Diversification of Forecasts -- Nelson Combination Method -- Granger-Ramanathan Combination Method -- Combinations with Time-Varying Weights --- Application to Economic Time Series

References

1. Berndt, E.R. (1991) –The Practice of Econometrics‖, Reading, Mass: AddisonWesley,
2. Gujrati, Damodar, N. (1995), Basic Econometrics, Mc Graw Hill, New Delhi.
3. Intriligator, M., R.G. Bodkin, and C. Hsiaq. (1996), Econometric Models, Techniques and Applications. Prentice Hall,
4. Johnson, J. (1984), Econometric Methods. New York: Mc Graw-Hill.
5. Kmenta, J. (1986), Elements of Econometrics. New York: Macmillan,
6. Krishna, K.L. ((1997) (Ed), Econometric Application in India Oxford University Press, New Delhi.
7. Lott, W., and S.C. Ray. (1992), Applied Econometrics: Problems and Data Sets. Fort Worth, Tex: The Dryden Press.
8. Maddala, G.S. (1977), Econometrics. Mc Graw-Hill, Inc.
9. J. Holton Wilson and Barry Keating(2009). **Business Forecasting, *Sixth Edition*** McGraw-Hill/Irwin
10. Ramanathan, Ramu. (2002), Introductory Econometrics with Applications. South Western: Thomson.
11. Walter Enders, (2010), Applied Econometrics Time Series‖, Wiley India Pvt. Ltd.
12. Kerry Patterson, (2008), An Introduction to Applied Econometrics: A Time Series Approach‖, Palgrave, MacMillan.
13. Davidson, R. and J.MacKinnon (2004): Econometric theory and methods, Oxford, Oxford University Press.
14. Hsiao, C. (1986): Analysis of panel data, Cambridge, Cambridge University Press.
15. Baltagi , B.H (2005): Econometrics Analysis of panel data, Wiley and Sons Ltd Wooldridge,
16. J.M. (2002): Econometric analysis of cross-section and panel data, Cambridge, Mass. MIT Press

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	DATA WAREHOUSING AND OLAP	100	4	0	0	3

Course Objective: This course equips a student with Data Warehousing knowledge,OLAP Architectures which helps in applying whenever required.

Unit I

Data Warehouse Fundamentals: Introduction to Data Warehouse,--OLTP Systems-- Differences between OLTP Systems and Data Warehouse-- Characteristics of Data Warehouse-- Functionality of Data Warehouse-- Advantages and Applications of Data Warehouse; Advantages-- Applications: Top- Down and Bottom-Up Development Methodology--Tools for Data warehouse development-- Data Warehouse Types:

Unit II

Planning and Requirements: Introduction-- Planning Data Warehouse and Key Issues-- Planning and Project Management in constructing Datawarehouse-- Data Warehouse Project-- Data Warehouse development Life Cycle, Kimball Lifecycle Diagram-- Requirements Gathering Approaches-- Team organization—Roles-- and Responsibilities:

Unit III

Data Warehouse Architecture: Introductions-- Components of Data warehouse Architecture-- Technical Architectures; Data warehouse architectures 1, 2, and 3 - Tool selection-- Federated Data Warehouse Architecture. Dimensional Modeling: Introduction: E-R Modeling-- Dimensional Modeling-- E-R Modeling VS Dimensional Modeling-- Data Warehouse Schemas-- Star Schema-- Inside Dimensional Table-- Inside Fact Table, Fact Less Fact Table—Granularity-- Star Schema Keys-- Snowflake Schema-- Fact Constellation Schema.

Unit IV

Extract, Transform and Load: Introduction: ETL Overview or Introduction to ETL-- ETL requirements and steps-- Data Extraction-- Extraction Methods-- Logical Extraction Methods-- Physical Extraction Methods-- Data Transformation-- Basic Tasks in Transformation--Major Data Transformation Types-- Data loading-- Data Loading Techniques-- ETL Tools: Data Warehouse & OLAP: Introduction: concept and Characteristics of OLAP-- Steps in the OLAP Creation Process-- Advantageous of OLAP—Concept of Multidimensional Data-- OLAP Architectures—MOLAP—ROLAP— HOLAP-- Data Warehouse and OLAP-- Hypercube & Multicubes

Unit V

Meta data Management in Data Warehouse-- Introductions to Metadata-- Categorizing Meta data-- Meta data management in practice-- Meta data requirements gathering-- Meta data classification-- Meta data collection strategies-- Meta Data Management in Oracle and SAS-- Tools for Meta data management.

References

1. Data Warehousing Data Mining and OLAP by Alex Berson,Stephen J.Smith Tata Mc Graw Hill
2. Data Mining: Concepts and Techniques, Third Edition by Han, Kamber & Pei.
3. Data Mining and Analysis Fundamental Concepts and Algorithms by Zaki & Meira.
4. Data Mining for Business Intelligence by Galit Shmueli,Nitin R.Patel,PeterC.Bruce

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	DATA MINING AND MACHINE LEARNING	**100**	**4**	**0**	**0**	**3**

UNIT- I:

Introduction to Data Mining: Introduction-- Scope of Data Mining-- What is Data Mining-- How does Data Mining Works-- Predictive Modeling-- Data Mining and Data arehousing-- Architecture for Data Mining: Profitable Applications-- Data Mining Tools:

UNIT- II:

Data Mining Techniques An Overview: Introduction-- Data Mining-- Data Mining Versus Database Management System-- Data Mining Techniques- Association rules—Classification—Regression—Clustering-- Neural networks.

UNIT- III:

The ingredients of machine learning, Tasks: the problems that can be solved with machine learning, Models: the output of machine learning, Features, the workhorses of machine learning. **Binary classification and related tasks:** Classification, Scoring and ranking, Class probability estimation **Beyond binary classification:** Handling more than two classes, Regression, Unsupervised and descriptive learning. **Concept learning**: The hypothesis space, Paths through the hypothesis space, Beyond conjunctive concepts

UNIT- IV:

Tree models: Decision trees, Ranking and probability estimation trees, Tree learning as variance reduction. **Rule models:** Learning ordered rule lists, Learning unordered rule sets, Descriptive rule learning, First-order rule learning **Linear models:** The least-squares method, The perceptron: a heuristic learning algorithm for linear classifiers, Support vector machines, obtaining probabilities from linear classifiers, Going beyond linearity with kernel methods.

UNIT- V:

Features: Kinds of feature, Feature transformations, Feature construction and selection. Model ensembles: Bagging and random forests, Boosting- **Dimensionality Reduction:** Principal Component Analysis (PCA), Implementation and demonstration. **Artificial Neural Networks:** Introduction, Neural network representation, appropriate problems for neural network learning, Multilayer networks and the back propagation algorithm.

TEXT BOOKS:

1) Machine Learning: The art and science of algorithms that make sense of data, Peter Flach, Cambridge.
2) Machine Learning, Tom M. Mitchell, MGH.

REFERENCE BOOKS:

1) Understanding Machine Learning: From Theory to Algorithms, Shai Shalev-Shwartz, Shai Ben-David, Cambridge.

Machine Learning in Action, Peter Harington, 2012, Cengag

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ENTREPRENEURSHIP AND SMALL ENTERPRISE MANAGEMENT
III SEMESTER

	INDIAN MODELS IN ENTREPRENEURSHIP	**100**	**4**	**0**	**0**	**3**

UNIT-I : Introduction : Concept and Characteristics of Entrepreneurship. Theories of Entrepreneurship. Process of Entrepreneurship. Entrepreneurship Environment. Barriers to Entrepreneurship. Entrepreneurship and Innovation-Innovation and Creativity-Innovation in Current Environment – Types of Innovation- Entrepreneurship and Economic Development. Corporate Entrepreneurship – Concept and Types.

UNIT-II : Entrepreneur : Concept, Characteristics Types, Roles and Functions of Entrepreneurs. Qualities of a Successful Entrepreneur, Ethical and Social Responsibilities of Entrepreneurs. Entrepreneur Vs. Manager. Entrepreneur Vs. Entrepreneurship. Entrepreneurial Mobility. Entrepreneurial Culture. Entrepreneurial Motivation.

UNIT-III : Entrepreneurship Development Programmes (EDP) : Need for and Significance of EDP. Objectives of EDP. Phases of EDP. Course Contents of and Curriculum for EDP. EDP at International Levels. EDP Programmes in India. Small and Medium Enterprises – Government Policies for Micro, Small and Medium Enterprises (MSMEs), Institutional Support System for MSMEs in India. Role of DICs, SFCs, SIDBI, EDI etc. Women Entrepreneurship-Rural Entrepreneurship.

UNIT-IV : New Venture Promotion : Identification of Business Opportunities- Choice of Appropriate Form of Business Organization. Step by step approach for starting a new venture-Determining the Size of Operation. Plant Location Decision- Choice of Technology- Sources of Raising Capital.

UNIT-V : Project Management : Concept, Characteristics, Components and Significance of Project Management-Role of Project Managers - Stages of Project Management- Components of Project Management. Project Life Cycle. Project Identification and Selection. Project Formulation and Appraisal.

References:

1. David H. Holt : Entrepreneurship – New Venture Creation (Prentice Hall of India, New Delhi)
2. Marc. J. Dollinger : Entrepreneurship – Strategies & Resources (Pearson Education, New Delhi)
3. Peter F. Drucker : Innovation and Entrepreneurship (William Heinemann Ltd., Landon)
4. M.B. Shukla : Entrepreneurship and Small Business Management (Kitab Mahal, Allahabad)
5. S.S. Khanaka : Entrepreneurial Development (S. Chand & Company Ltd., New Delhi)
6. Vasant Desai : Dynamics of Entrepreneurial Development & Management (Himalaya Publishing House, Bombay)
7. B.K. Singh : Entrepreneurship (Wisdom Books)

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	SOCIAL ENTREPRENEURSHIP	100	4	0	0	3

UNIT I
Need and importance of Third Sector in development. Typologies of third sector - Voluntary, NGO, NPO, CBO, CSO, Growth of third sector in India – Performance and environment of third sector. Third sector relationship to state and civil society

UNIT II
Concept, Definition, Importance – Role of a social entrepreneurship –History of Social Entrepreneurship- Social entrepreneurship Vs business entrepreneurship –Shift to Social Entrepreneurship- social entrepreneurs and social change –qualities and traits of social entrepreneurs.

UNIT III
Concept, Definition, Importance of social enterprises – Social Business-Principles and Social Innovation-similarities and differences between social enterprises and non profits – types of social enterprises – concept of Triple Bottom Line, Bottom of the Pyramid, Sustainopreneurship – Corporate Social Responsibility– Boundaries of Social Entrepreneurship. Select case studies of Indian Social Enterprises.

UNIT IV
Global & National environment to promote social enterprises and social entrepreneurship. Financial Management of social enterprises – venture capital for social enterprises – Corporate, Community and government support for social enterprises

UNIT V
Application of marketing principles in welfare and development field – social marketing. Marketing of Social Services – Case studies related to Social and service marketing in the field of Health, Education, Environment protection, Energy consumption and Human rights.

REFERENCES
1. Alex Nicholls, (2006), Social Entrepreneurship: New Models of Sustainable Social Change, New York: Oxford University Press.
2. David Bornstein, (2007). How to Change the World: Social Entrepreneurs and the Power of New Ideas, New York: Oxford University Press.
3. Fred Setterberg, Kary Schulman (1985), Beyond Profit: Complete Guide to Managing the Non Profit Organizations, New York: Harper & Row.
4. Gregory Dees, Jed Emerson, Peter Economy (2002), Enterprising Non Profits – A Toolkit for Social Entrepreneurs, New York: John Wiley and Sons.
5. Peter Drucker (1990), Managing the Non Profits Organizations: Practices and Principles, New York: HarperCollins.

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	Business Plan Preparation for Small Business	**100**	**4**	**0**	**0**	**3**

OBJECTIVE: To explain relevance of business plans while taking business decisions for small business.

UNIT - I
Business Plan - Meaning- The why of business plan - Basic parameters - Timing of decision undertaken Project parameters - the common considerations - Factors of successful business - capital management- financial control -anticipating change and adaptability.

UNIT – II
Business plan process - sources of information - Internet, government sources and statistics - offline research resources - library - SBDC'S -Trade and industries associations - sources of market research - evaluating data- benefits of market study -coverage of market study - information sources.

UNIT - III
Business plan components - The Executive summary - company description - Industry analysis and trends - Target market - Competition - strategic position and risk assessment - Marketing plan and sales strategy - operations - Technology plan -management and organization.

UNIT – IV
Starting the Venture - Generating business idea – Source of new ideas - Methods of generating ideas - Steps in setting up a small business enterprise,

UNIT V:
Concept of Project Appraisal - Environmental scanning - Competitor and industry analysis - Feasibility study – Market feasibility, Technical / operational feasibility - Financial Feasibility - Managerial competence. Functional plans - Marketing plan – Financial plan.

Suggested Readings:
1. Entrepreneurship (6th Edition) – Robert D Hisrich, Tata McGraw Hill
2. Entrepreneurship: A Contemporary Approach – Kuratko, Thomson Learning Books
3. Small Scale Industries and Entrepreneurship (2003) – Vasant Desai, Himalaya Publishing House
4. Entrepreneurial Development – S.S. Khanka, S. Chand & Co

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	Entrepreneurial Marketing	**100**	**4**	**0**	**0**	**3**

OBJECTIVE:
To explain start-ups, early growth stage and more mature companies have used entrepreneurial marketing as an essential competitive weapon to grow their business.

UNIT – I
Entrepreneurial marketing and Venture Opportunities: Introduction – Definitions - Methods, Channel of Marketing - Marketing Institutions and Assistance for Entrepreneurs - Customer and competitor analysis.

UNIT – II
New Tools of Entrepreneurial Marketing: Introduction - Demand-based Pricing - Entrepreneurial market opportunity analysis - Entrepreneurial marketing strategies - The entrepreneurial marketing plan – Objectives and importance of entrepreneurial marketing plan.

UNIT - III
Entrepreneurial pricing and distribution – Pricing strategies for distribution companies in India - Entrepreneurial promotion - Entrepreneurial products and services development

UNIT – IV
Entrepreneurial Tools to establish a Competitive Advantage: Branding, Pricing, Positioning, and Targeting – Entrepreneurial Advertising – Entrepreneurial sales promotion

UNIT V:
Entrepreneurial social marketing- Meaning – Application - Advantages and limitations – Experimental Marketing - Sales growth strategies.

Suggested Readings:
1. Entrepreneurship (6th Edition) – Robert D Hisrich, Tata McGraw Hill
2. Entrepreneurship: A Contemporary Approach – Kuratko, Thomson Learning Books
3. Small Scale Industries and Entrepreneurship (2003) – Vasant Desai, Himalaya Publishing House
4. Entrepreneurial Development – S.S. Khanka, S. Chand & Co

	Planning, Structuring and Financing Small Business	**100**	**4**	**0**	**0**	**3**

Objectives:
To enable the students to know the importance of small scale business in a developing economy like India and motivate the students to start small scale business.

Unit I:
Basics of Small Business Enterprise: – Definition – Features – Role of Small Business in Economic Development – Reasons for Establishing Small Business – Quality of Small Businessmen – Advantages and Disadvantages of Small Business – Reasons for Failures of Small Business – Characteristics of Successful Small Businessmen – Different Stages of Small business – Steps in Setting up a Small Business – Crisis Management in Business – Relationships between Small and Large Units – Small Sector in India – A note on Family Business.

Unit II:
Dynamics of Small Business Concepts and Definitions of Small Scale Industries (SSIs) – Role of SSIs – Government Policy and Development of SSIs – Growth and Performance – SSI Sector and Committee Report – Reservation of items for SSI – Problems of SSI – Sickness of SSI: Causes, Symptoms and Cures – Prospects of SSI in free Economy.

Unit III:
Institutions Supporting Small Business Central, State and Other Institutional Support for SSI – Technological Upgradation and Institutional facility for SSI – Incentives and Subsidies for SSI.

Unit IV:
Management of Small Business Production Management – Financial Management – Marketing Management – Strategic Management – Personal Management – and Office Management in Small Business Enterprises.

Unit V:
Global Opportunities for Small Business Small Enterprises in International Business – Export Documents and Procedures for Small Enterprises – E-commerce and Small Enterprises – Exposure and Observation Visit: Poultry, Sericulture, Courier, Cell Phone Sales and Service, Dairy, Mushroom Cultivation, Ornamental Pottery, Dying Unit, Power loom and Handloom, Blood Bank, Rice Mill and Food and Fruit Processing Unit – Role of Women SHGs in Micro Enterprises.

Suggested Readings:
1. Barrow C. The Essence of Small Business, Prentice Hall of India, New Delhi, 1997.
2. Bedapatai Mohanty, Economics of Small Scale Industries, Ashish, New Delhi, 1986
3. Charantimath P.M., Entrepreneurship Development and Small Business Enterprises, Pearson Education, New Delhi, 2006.
4. Cormon J and Lussier R.N., Small Business Management: A Planning Approach, IRWIN, London, 1996
5. Datt, Ruddar and Sundharam K.P.M., Indian Economy, S.Chand, New Delhi, 2006.
6. Desai S.S.M., Industrial Economy of India, Himalaya Publishers, New Delhi, 1968.
7. Development Commissioner, Small Scale Industries, Ministry of ID and IT, Government of India, New Delhi, 1985.
8. Dhanulinga Nadar, Small Scale Industry Interrelationship with Large Scale Industry, Rainbow, Coimbatore, 1985.
9. Francis Cherunilam, Industrial Economics : Indian Perspectives, Himalaya, Delhi, 1989.

10. Ganapathy Iyer, E.V., Indian Industrial Development Problems, Ganapathy Trans – West,

Madras, 1983.

	Marketing for Small Business	100	4	0	0	3

Unit I
Introduction to Marketing for small business – Nature and Characteristics – Distinction between corporate marketing and marketing for small business – small business Marketing: Concept and Scope – Nature – Characteristics, Taxonomy – Composition of Small Business Market – small business Requirements – Consumer Durables and Non-Durables – Problems of Small Business Marketing – Attractiveness of Market – Factors affecting for Small business Marketing – Value Addition to Small Business Marketing - Characteristics of Successful Small Businessmen – Different Stages of Small business – Crisis Management in Business.

Unit II
Small Business Market Environment: Factors in Small Business Market Environment: Social, Economic, Ethical, Political, Physical, Technological, and Demographic – Occupational Pattern – Income Generation – Expenditure Pattern – Small Business Market Infrastructure - Dynamics of Small Business Concepts and Definitions of Small Scale Industries (SSIs) – Role of SSIs – Government Policy and Development of SSIs – Growth and Performance – SSI Sector and Committee Report – Reservation of items for SSI.

Unit III
Small Business Marketing Channels Small Business Marketing Channels – Old Set-up – New Players – New Approaches – Marketing and Distribution Trends, New Dynamics – Marketing Channels for Food grains: Oil Seeds – Egg – Live Poultry – Social Marketing - Opportunity for Retail Trading.

Unit IV
Small Business Marketing Promotional Strategies: Small Business Market Segmentation – Targeting – Selection of Segments – Coverage of Segments – Positioning – Product, Pricing, Distribution and Promotional Strategies - Global Opportunities for Small Business Small Enterprises in International Business – Export Documents and Procedures for Small Enterprises – E-commerce and Small Enterprises.

Unit V Marketing of Small Business Inputs and Outputs: Small Business Inputs: Market Mechanism of inputs for agriculture and Allied industries - Small Business Outputs: Marketing of agricultural produces – concepts of marketable and marketed surplus – market mechanism: unregulated and regulated – Marketing of Small Business industrial products – Mechanism, opportunities and challenges.

Reference
1. Shukla M.B. Entrepreneurship and Small Business Management, Kitab Mahal, 2003, Agra.
2. Ashis Gupta Indian Entrepreneurial Culture, Wishwa Prakashan Ltd., Surrey, UK.,1994.
3. Colombo Plan Entrepreneurship Development, Staff College Tata McGraw-Hill, New Delhi, 1998 for Technician Education.
4. Malli D.D. Training for Entrepreneurship and Self-Employment. Mittal, New Delhi, 1999
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	Finance and Accounting for Small Business	**100**	**4**	**0**	**0**	**3**

Unit – I

Accounts - Accounting Process - Accounting Concepts & Conventions - Accounting equation - Basic Accounting Procedure - Single Entry System : an admixture - Double Entry System - Accounting Elements - Classification of Accounts - Golden Rules - Journal - Classification of Journal - Ledger : Principal Books of Accounts - Cash Book - Vouchers-The documents to the transactions - Trial Balance - Depreciation - Preparation of Final Accounts and Balance Sheet - Techniques of Preparation of Final Accounts -The Balance Sheet

Unit – II

Finance: Understanding Balance Sheet – It‘s Use - Profit and Loss Account (P/L A/c) - Understanding Financial Statement - Ratio Analysis - Cash Flow Statements - Cash Budget - Working Capital : Determination & Calculation - Operating Cycle - Computation of Working Capital - Framework for Regulation of Bank Credit - Long-Term Source of Finance - Retained Earnings - Equity Capital / Equity Share - Debenture - Preference Shares.

Unit III

Costing: Introduction - Classification Cost - Use of Cost Data - Marginal Costing - Cost-Volume Profit Relationship - Mathematical Relationship between Cost-Volume Profit - Margin of Safety -BEP Analysis : Graphical Analysis - Use of Marginal costing in decision making- pricing decision, make or buy etc.

Unit IV

Taxation: Income Tax - Definitions - Residential Status - How to Compute Total Income - Profit and Gains of Business or Profession - Deduction Under Chapter VIA - Central Sales Tax Act, 1956 - Preliminary - Formulation of Principles for Determining when a Sale or Purchase of Goods Taken Place in the Course of Inter-state Trade or Commerce or Outside a State or in the Course of Import or Export - Inter-State Sales Tax - Goods of Special Importance in Inter-State Trade or Commerce - Liability in Special Cases - Central Excises Act, 1944 - Preliminary - Levy and Collection of Duty -Powers and Duties of Officers and Landholders - Transport by Sea - Adjudication of Confiscations and Penalties - Appeals - Presumption as to Documents - Supplemental Provisions.

Unit V

Goods and Services Tax (GST): – concept and status – Genesis - GST and Centre-State Financial Relations - Constitution (One Hundred and First) Amendment Act, 2016 - Goods and Services Tax Council (GSTC) - Salient Features of GST - Benefits of GST - Goods and Services Tax Network – GST Registration process of business enterprises – GST HSN – SAC Cods and tax rates.

References:

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6. Charities An Exhaustive Treatise for Tax and Other....by S Rajaratnam , M. Natarajan , C.P. Thangaraj

7. Laws of Trade Tax Central Sales Tax and Tax on Ent. ..by O S Vatsa
8. Trade Tax, Central Sales Tax & Tax on Entry of Goo. ... by Arvind Agarwal , Adarsh K Gupta
9. GST official website: https://www.gst.gov.in

	Technology Appreciation and Intellectual Property Rights	**100**	**4**	**0**	**0**	**3**

UNIT I

Introduction , Definitions, Role and importance , Technology developments, implications of Technology Management, Technology change, TLC, Diffusion and Growth of Technologies - Technological Transformation alternatives, Technology Policy and Planning, Technology development-Options & Strategies, Socio-Economic planning, production functions & Technological Change, Macro effects of Technology change.

UNIT II

Technology Transfer - Models, Modes, Technology search strategy, Dimensions of Technology Transfer, Features & Routes of Technology Transfer, Technology absorption capabilities, Pricing of Technology Transfer agreements, Code of conduct for Technology transfer , Government initiative, Technology transfer and absorption process at unit level.

Unit III

Technology cycles, innovation streams, Managing through cycles of technological change - Planned innovation, planned innovation systems, Market driven innovation: Commercialization of Intellectual Property: Traditional IP and Evolving IP - Assignment – Licensing – Cross License – Patent Pool – Negotiations – Defensive Publications – Technical Disclosures – Patent Pooling – Patent Trolling - Brand Management- Brand and Pricing Strategies – Patent Mining – Patent Landscaping and Patent Mapping

Unit IV

Strategic Management of Intellectual Property: Defensive & Offensive Strategies – Intellectual Asset Management - Intellectual Property Audit – Identification & Grouping of Intangible Assets into Bundles - Intangible Asset Management Plan – Value Maximization Strategies – Value Extraction Strategies – Licensing Process and Management

Unit V

Valuation of Intellectual Property: Need for IP Valuation – Approaches of IP Valuation – Cost Approach – Income Approach – Market Approach – Methods of IP Valuation – "25% Rule" Method - Industry Standards Methods - Ranking Method - Surrogate Methods - Disaggregation Methods - Monte Carlo Method - Real Options Methods - The CAV Method - Market Value Method -Collateralization of IPA

References:

1. Sunita K. Sreedhararn , An Introduction to Intellectual Asset Management.
2. Patrick H. Sullivan, Profiting from Intellectual Capital: Extracting Value from Innovation 3. Tulika Rastogi, IP Audit: Your Way to Healthy Organisation
3. Gordon V. Smith and Russell L. Parr, Valuation of Intellectual Property and Intangible Assets, 3rd Edition
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	Innovation Technology Management	100	4	0	0	3

Unit – I

Analyzing the Current Business Scenario, Innovation and Creativity - An Introduction, Innovation in Current Environment, Types of Innovation , School of Innovation. Challenges of Innovation, Steps of Innovation Management, Idea Management System, Divergent Vs Convergent Thinking, Levers of Idea Management. Experimentation in Innovation Management, Idea Championship,Participation for Innovation, Co-creation for Innovation , Proto typing to Incubation.

Unit – II

Marketing of Innovation, Technology Innovation Process, Technological Innovation Management Planning, Technological Innovation Management Strategies, Technology Forecasting.

Unit – III

Introduction to Technology Management:Concept and Meaning of Technology and Technology Management- Technology; Technology management, Evolution and Growth of Technology, Role and Significance of Technology Management, Impact of Technology on Society and Business- Technology and competition; Key issues in managing technological innovation, Forms of Technology- Process technology; Product technology

Unit –IV

Technology Acquisition*:* Technology Acquisition, Alternatives for Acquiring New Technologies, Reasons Compelling a Company for Obtaining a New Technology, Management of Acquired Technology, Measures of Scale and Mechanisms for Acquiring Technologies-Economy of scale or Scale economy; Levels of scale; The measurement of scale; Factors affecting the choice of scale

Unit - V

Technology Forecasting*:*Concept of Technology Forecasting- Characteristics of technology forecasting ; Technology forecast method; Principles of technology forecasting, Technology Forecasting Process, Need and Role of Technology Forecasting, Forecasting Methods and Techniques, Planning and Forecasting, *Technology Strategy and Competitiveness:*Technology Strategy-Technology strategy and management; Elements of an accessible technology strategy, Innovation Management, Competitive Advantage- Components of competitive advantage; Creating competitive advantage using value chain, Technology Management Evaluation or Assessment

References:

1. Industry, Innovation and Infrastructure: Leal Filho, W. (Ed), Azul, A. M. (Ed), Brandli, L. (Ed), Lange Salvia, A. (Ed), Wall, T. (Ed) *(2021)*
2. Innovation Management in the Intelligent World: Daim, T. U. (Ed), Meissner, D. (Ed) *(2021)*
3. *Technological Innovation and International Competitiveness for Business Growth: Ferreira, J. J. M. (Ed), Teixeira, S. J. (Ed), Rammal, H. G. (Ed)* (2020)
4. Entrepreneurship, Technology Commercialization, and Innovation Policy in Africa: Daniels, C. U. (Ed), Dosso, M. S. (Ed), Amadi-Echendu, J. (Ed) *(2020)*
5. *Business innovation with new ICT in the Asia-Pacific: Case studies: Kosaka, M. (Ed), Wu, J. (Ed), Xing, K. (Ed), Zhang, S. (Ed)* (2021)

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	Venture Valuation and Accounting	100	4	0	0	3

Unit I
Joint Ventures: Concept and Meaning of Joint Ventures, Features, Need, growth and Types of Joint Ventures, Structures, process and Legal aspects – Advantages and Problems faced in Joint Ventures, Prospects of Joint Ventures and Strategic Alliance - Relevant case study of successful and failed joint ventures.

Unit II
Mergers and Acquisitions: Introduction to mergers, types of mergers, theories of mergers & acquisitions; Cross-border mergers and acquisitions, issues and challenges in cross border M&A. Handling cross-culture and taxations issues in cross-brder M&A. Analysis of Post-Merger Performance. Demerger, types of demerger, reverse merger, buyback of shares, leverage buy-out strategy, merger strategy - growth, synergy, operating synergy, financial synergy, diversification. Takeover and its types, takeover strategy, takeover bids, legal framework for mergers and acquisitions, leverages and buyouts.

Unit III
Deal Valuation and Evaluation: Factors affecting valuation basics, methods of valuation, cash flow approaches, economic value added (EVA), sensitivity analysis, valuation under takeover regulation, valuation for slump sale, cost-benefit analysis and swap ratio determination

Unit IV
Post-Merger Evaluation: Financial Evaluation of Mergers & Acquisitions, Impact on shareholders_ Wealth; Methods of payment and financing options in mergers & acquisitions, financing decision, Merger, Acquisition and Competition law 2002, SEBI (Securities & Exchange Board of India) Takeover Code 2011 and criteria for negotiating friendly takeover.

Unit V
Consignment Accounts: Important terms; Accounting records; Valuation of unsold stock; Conversion of consignment into branch Joint Venture Accounts: Meaning of joint venture; Joint venture and partnership; Accounting records Branch Accounts: Partnership Accounts Essential characteristics of partnership; Partnership Deed; Final Accounts; Adjustment after closing the accounts; Fixed and fluctuating capital; Goodwill; Joint Life Policy; Change in Profit Sharing Ratio Reconstitution of a partnership firm- Admission of a partner, Retirement of a partner‘ Death of a partner; Amalgamation of partnership firms; Dissolution of a partnership firm;- Modes of dissolution of a firm; Accounting entries; Insolvency of Partners;

References

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