You Choose, We Do It

St. JOSEPH'S COLLEGE OF ENGINEERING

(An Autonomous Institution)

St. Joseph's Group of Institutions

Jeppiaar Educational Trust

OMR, Chennai - 119.

MASTER OF BUSINESS ADMINISTRATION (2YEARS)

AUTONOMOUS

CURRICULUM AND SYLLABUS 2021

FACULTY OF MANAGEMENT SCIENCES
MASTER OF BUSINESS ADMINISTRATION (2YEARS)
CHOICE BASED CREDIT SYSTEM

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

MBA programme curriculum is designed to prepare the post graduate students

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

PROGRAMME OUTCOMES (POs)

On successful completion of the program,

1. Ability to understand the principles and concepts in management.
2. Ability to apply knowledge of management theories and practices.
3. Ability to understand the situations, analyze and solve business problems.
4. Ability to communicate and negotiate effectively, to achieve organizational and individual goals.
5. Ability to work in teams to meet organizational goals.
6. Ability to exhibit leadership skills appropriate for managerial roles in organizations.
7. Ability to analyse global, economic, and ethical aspects of business.
8. Ability to pursue lifelong learning.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

1. Ability to gain knowledge, skills and attitudes to become an effective manager.
2. Ability to provide socially acceptable technical solutions to complex managerial problems with the application of modern and appropriate techniques for sustainable development relevant to professional managerial practice.
3. Ability to apply the knowledge of ethical and management principles required to work in a team as well as to lead a team.

MAPPING OF PEOS WITH POS

Programme Educational Objectives	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
I	3	3	2	2	3	3	2	2
II	1	3	1	2	3	1	3	2
II	3	3	2	3	3	2	3	3
IV	2	1	2	3	3	1	3	3
V	1	3	3	2	2	3	1	2

MAPPING OF SUBJECTS WITH POS

SEM	COURSE TITLE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
I	Statistics for Management	√	√	√	√				
	Management Concepts and Organizational Behavior	√	√	√	√	√	√		
	Managerial Economics	√	√	√	√				
	Accounting for Decision Making	√	√	√	√				√
	Legal Aspects of Business	√	√	√	√	√			√
	Information Management	√	√	√	√	√	√	√	√
	Research Methodology and IPR								
	Indian Ethos and Business (Ethics Seminar)	√		√	√	√		√	√
	Business Communications (Laboratory)	√			√	√	√		
	Quantitative Techniques for Decision Making	√		√					
	Financial Management	√	√	√	√				
	Human Resource Management	√	√	√	√	√	√	√	
	Operations Management	√	√	√	√			√	√
	Marketing Management	√	√	√	√	√	√	√	√
	Business Analytics	√		√	√	√	√	√	√
	Non-Functional Elective	*** shown in separate table**							
	Data Analysis and Business Modelling (Laboratory)	√	√	√	√				√
	Strategic Management	√	√	√	√	√	√	√	
	International Business	√	√	√	√	√	√	√	√
	Creativity and Innovation Laboratory		√	√	√	√	√		√
	Elective I	*** shown in separate table**							
	Elective II								

	Elective III								
	Elective IV								
	Elective V								
	Elective VI								
	Summer Internship	√	√	√	√	√	√	√	√
IV	Project work	√	√	√	√				√

MAPPING OF NON-FUNCTIONAL ELECTIVES WITH PO'S

Sl.No.	COURSE TITLE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
1	Entrepreneurship Development	√	√	√	√	√	√		√
2	Business Ethics and Corporate Governance	√	√	√	√			√	√
3	Event Management	√	√	√	√	√	√	√	√
4	Sustainability Management	√	√	√	√				√

MAPPING OF FUNCTIONAL ELECTIVES WITH POS

Sl.No.	COURSE TITLE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
Marketing Management									
1	Retail Marketing	√	√	√	√	√			√
2	Consumer Behavior	√	√	√	√				√
3	Integrated Marketing Communications	√	√	√	√	√			√
4	Services Marketing	√	√	√	√	√	√		√
5	Sales and Distribution Management	√	√	√	√	√	√		√
6	Brand Management	√	√	√	√	√	√		√
7	Customer Relationship Management	√	√	√	√				√
8	Marketing Analytics	√	√	√	√	√		√	√
Financial Management									
1	Security Analysis and Portfolio Management	√	√	√	√			√	√
2	Financial Markets	√	√	√				√	√
3	Banking and Financial Services	√	√	√	√	√	√		√
4	Financial Derivatives	√	√	√	√	√	√		√
5	Financial Modelling	√	√	√	√		√		√
6	International Trade Finance	√	√	√	√	√		√	√
7	Behavioral Finance	√	√	√	√	√	√	√	√

Human Resource Management									
1	Strategic Human Resource Management	√	√	√	√			√	√
2	Industrial Relations and Labour Welfare	√	√	√	√			√	√
3	Social Psychology	√	√	√	√	√	√	√	√
4	Organizational, Design, Change and Development	√	√	√	√			√	√
5	Managerial Behavior and Effectiveness	√	√	√	√	√	√	√	√
6	Personal Effectiveness	√	√	√	√	√	√	√	√
7	Labour Legislation	√	√	√	√			√	√
8	Human Resource Analytics	√	√	√	√	√	√	√	√
Business Analytics									
1	Data Mining for Business Intelligence	√	√	√	√				√
2	Big Data Analytics	√	√	√	√			√	√
3	Cloud computing	√	√	√	√			√	√
4	Deep Learning and Artificial intelligence	√	√	√	√			√	√
5	R Programming	√	√	√	√			√	√
6	Multivariate Data Analysis	√	√	√	√			√	√
7	Social Media and Web Analytics	√	√	√	√			√	√
Operations Management									
1	Logistics Management	√	√	√	√	√		√	√
2	Materials Management	√	√	√	√				√
3	Product Design	√	√	√	√	√	√	√	√
4	Project Management	√	√	√	√	√			√
5	Service Operations Management	√	√	√	√	√	√		√
6	Supply Chain Management	√	√	√	√	√		√	√
7	Quality Management	√	√	√	√	√			√
Systems Management									
1	E-Business	√	√	√	√	√			√
2	Enterprise Resource Planning	√	√	√	√	√			√
3	Software Project and Quality Management	√	√	√	√	√			√
4	Data Mining for Business Intelligence	√	√	√	√	√			√
5	Internet of Things	√	√	√	√	√			√
6	Advanced Database	√	√	√	√	√			√
	Management System	√	√	√	√	√			√

ANNA UNIVERSITY, CHENNAI
AFFILIATED INSTITUTIONS
REGULATIONS -2021
CHOICE BASED CREDIT SYSTEM
MASTER OF BUSINESS ADMINISTRATION (2YEARS)
CURRICULA AND SYLLABI I TO IV SEMESTERS

SEMESTER -I

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
THEORY							
1	MA1171	Statistics for Management	PCC	3	0	0	3
2	MB1101	Management Concepts and Organizational Behavior	PCC	3	0	0	3
3	MB1102	Managerial Economics	PCC	3	0	0	3
4	MB1103	Accounting for Management	PCC	3	0	0	3
5	MB1104	Legal Aspects of Business	PCC	3	0	0	3
6	MB1105	Information Management	PCC	3	0	0	3
7	MB1106	Research Methodology and IPR	PCC	3	0	0	3
PRACTICALS							
8	MB1107	Seminar -1 Indian ethos and business ethics	EEC	0	0	4	2
9	MB1108	Business Communications (Lab)	PCC	0	0	4	2
10	MB1109	Comprehensive Viva–I*	EEC	0	0	0	1
11	MB0101	Personality Enrichment	VAC	0	0	2	0
		TOTAL		**21**	**0**	**10**	**26**

*** Comprehensive Viva will be conducted at the end of the semester which will cover all theory subjects of that Semester by faculty; no end semester examination is required.**

SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
THEORY							
1	MB1201	Quantitative Techniques For Decision Making	PCC	3	0	0	3
2	MB1202	Financial Management	PCC	3	0	0	3
3	MB1203	Human Resource Management	PCC	3	0	0	3
4	MB1204	Operations Management	PCC	3	0	0	3
5	MB1205	Marketing Management	PCC	3	0	0	3
6	MB1206	Business Analytics	PCC	3	0	0	3
7		Non-Functional Elective	OEC	3	0	0	3
PRACTICALS							
8	MB1207	Seminar – II Pro-social Behaviour	EEC	0	0	4	2

9	MB1208	Data analysis and Business Modelling (Laboratory)	PCC	0	0	4	2
10	MB1209	Comprehensive Viva-II*	EEC	0	0	0	1
11	MB0201	Fundamentals of Capital Markets / R Programming	VAC	0	0	2	0
		TOTAL		**21**	**0**	**10**	**26**

NOTE: In the second Semester

- Students need to choose one elective from the Non-Functional stream.
- Summer internship–minimum of 4 weeks of internship. The internship report has to be submitted to the department within 4 weeks of the reopening date of the 3rd semester. The report should contain the Training undergone the departments he/she was trained with and duration (chronological diary) along with the skill acquired.
- Comprehensive Viva will be conducted at the end of the semester which will cover all theory subjects of that Semester by faculty, no end semester examination is required.

SEMESTER III

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
THEORY							
1	MB1301	Strategic Management	PCC	3	0	0	3
2	MB1302	International Business	PCC	3	0	0	3
3		Elective I	PEC	3	0	0	3
4		Elective II	PEC	3	0	0	3
5		Elective III	PEC	3	0	0	3
6		Elective IV	PEC	3	0	0	3
7		Elective V	PEC	3	0	0	3
8		Elective VI	PEC	3	0	0	3
PRACTICALS							
9	MB1309	Creativity and Innovation Laboratory	EEC	0	0	4	2
10	MB1310	Summer Internship	EEC	0	0	4	2
11	MB1311	Comprehensive Viva–III*	EEC	0	0	0	1
		TOTAL		**24**	**0**	**8**	**29**

NOTE:

- In the third semester Students need to choose three electives from 2 functional streams for Dual Specialization.

* Viva will be conducted at the end of 3rd semester which will cover all theory subjects of 3rd. semester.

SEMESTER IV

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
PRACTICALS							
1	MB1401	Project Work	EEC	0	0	24	12
		TOTAL		**0**	**0**	**24**	**12**

TOTAL NO. OF CREDITS: 93

NON -FUNCTIONAL ELECTIVES

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
THEORY							
1	MB1211	Entrepreneurship Development	PCC	3	0	0	3
2	MB1212	Business Ethics and Corporate Governance	PCC	3	0	0	3
3	MB1213	Event Management	PCC	3	0	0	3
4	MB1214	Sustainability Management	PCC	3	0	0	3

FUNCTIONAL ELECTIVES

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
MARKETING MANAGEMENT							
1	MB1001	Retail Marketing	PEC	3	0	0	3
2	MB1002	Consumer Behavior	PEC	3	0	0	3
3	MB1003	Integrated Marketing Communications	PEC	3	0	0	3
4	MB1004	Services Marketing	PEC	3	0	0	3
5	MB1005	Sales and Distribution Management	PEC	3	0	0	3
6	MB1006	Brand Management	PEC	3	0	0	3
7	MB1007	Customer Relationship Management	PEC	3	0	0	3
8	MB1041	Marketing Analytics	PEC	3	0	0	3
FINANCIAL MANAGEMENT							
1	MB1008	Security Analysis and Portfolio Management	PEC	3	0	0	3
2	MB1009	Financial Markets	PEC	3	0	0	3
3	MB1010	Banking and Financial Services	PEC	3	0	0	3
4	MB1011	Financial Derivatives	PEC	3	0	0	3
5	MB1012	Financial Modelling	PEC	3	0	0	3
6	MB1013	International Trade Finance	PEC	3	0	0	3
7	MB1014	Behavioral Finance	PEC	3	0	0	3
HUMAN RESOURCE MANAGEMENT							
1	MB1015	Strategic Human Resource Management	PEC	3	0	0	3
2	MB1016	Industrial Relations and Labour Welfare	PEC	3	0	0	3
3	MB1017	Social Psychology	PEC	3	0	0	3
4	MB1018	Organizational Design, Change and Development	PEC	3	0	0	3
5	MB1019	Managerial Behavior and Effectiveness	PEC	3	0	0	3
6	MB1020	Personal Effectiveness	PEC	3	0	0	3

7	MB1021	Labour Legislation	PEC	3	0	0	3
8	MB1042	Human Resource Analytics	PEC	3	0	0	3
BUSINESS ANALYTICS							
1	MB1022	Data Mining for Business Intelligence	PEC	3	0	0	3
2	MB1023	Big Data Analytics	PEC	3	0	0	3
3	MB1024	Cloud computing	PEC	3	0	0	3
4	MB1025	Deep Learning and Artificial intelligence	PEC	3	0	0	3
5	MB1026	R Programming	PEC	3	0	0	3
6	MB1027	Multivariate Data Analysis	PEC	3	0	0	3
7	MB1040	Social Media and Web Analytics	PEC	3	0	0	3
OPERATIONS MANAGEMENT							
1	MB1028	Logistics Management	PEC	3	0	0	3
2	MB1029	Materials Management	PEC	3	0	0	3
3	MB1030	Product Design	PEC	3	0	0	3
4	MB1031	Project Management	PEC	3	0	0	3
5	MB1032	Service Operations Management	PEC	3	0	0	3
6	MB1033	Supply Chain Management	PEC	3	0	0	3
7	MB1034	Quality Management	PEC	3	0	0	3
SYSTEMS MANAGEMENT							
1	MB1035	e-Business	PEC	3	0	0	3
2	MB1036	Enterprise Resource Planning	PEC	3	0	0	3
3	MB1037	Software Project and Quality Management	PEC	3	0	0	3
4	MB1038	Internet of Things	PEC	3	0	0	3
5	MB1039	Advanced Database Management System	PEC	3	0	0	3
6	MB1022	Data Mining for Business Intelligence	PEC	3	0	0	3

AUDIT COURSES*

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
THEORY							
1.	AX1001	English for Research Paper Writing	AC	2	0	0	0
2.	AX1002	Disaster Management	AC	2	0	0	0
3.	AX1003	Value Education	AC	2	0	0	0
4.	AX1004	Constitution of India	AC	2	0	0	0
5.	AX1006	Stress Management by Yoga	AC	2	0	0	0

Note: * Registration for any of these courses is optional to students

OPEN ELECTIVE COURSES

(OFFERED TO OTHER DEPT)

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
THEORY							
	OMB101	Total Quality Management	OEC	3	0	0	3
1	OMB102	Logistics and Supply Chain Management	OEC	3	0	0	3
2	OMB103	Cost Management of Engineering Projects	OEC	3	0	0	3

PROFESSIONAL ELECTIVE COURSES
(OFFERED TO OTHER DEPT)

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
THEORY							
1.	MG1001	Principles of Management	OEC	3	0	0	3
2.	MG1002	Operations Research	OEC	3	0	0	3
3.	MG1003	Applied Operations Research	OEC	3	0	0	3

CATEGORY BASED CREDIT AND SPLIT-UP – SEMESTER WISE

Semester	PCC	PEC	EEC	OEC	Total credit
I	23	-	3	-	26
2	20	-	3	3	26
3	6	18	5	-	29
4	-	-	12	-	12
Total Credit	**49**	**18**	**23**	**3**	**93**

MA1171	STATISTICS FOR MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

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

UNIT I PROBABILITY **9**

Basic definitions and rules for probability, conditional probability independence of events, Baye's theorem, and random variables, Probability distributions: Binomial, Poisson, Uniform and Normal distributions. **CO1**

UNIT II SAMPLING DISTRIBUTION AND ESTIMATION **9**

Introduction to sampling distributions, sampling distribution of mean and proportion, application of central limit theorem, sampling techniques. Estimation: Point and Interval estimates for population parameters of large sample and small samples, determining the sample size. **CO2**

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

Hypothesis testing: one sample and two sample tests for means and proportions of large samples(z-test), one sample and two sample tests for means of small samples (t-test), F- test for two sample standard deviations. ANOVA one and two way. **CO3**

UNIT IV NON-PARAMETRIC TESTS **9**

Chi-square tests for independence of attributes and goodness of fit. Sign test for paired data. Rank sum test. Kolmogorov-Smirnov – test for goodness of fit, comparing two populations. Mann –Whitney U test and Kruskal Wallis test. One sample run test. **CO4**

UNIT V CORRELATION, REGRESSION AND TIME SERIES ANALYSIS **9**

Correlation analysis, estimation of regression line. Time series analysis: Variation in time series, trend analysis, cyclical variations, seasonal variations and irregular variations. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. Richard I. Levin, David S. Rubin, Masood H. Siddiqui, Sanjay Rastogi, Statistics for Management, Pearson Education, 8th Edition,2017.
2. Prem S. Mann, Introductory Statistics, Wiley Publications, 9th Edition, 2015.
3. T N Srivastava and Shailaja Rego, Statistics for Management, Tata McGraw Hill, 3rd Edition 2017.

REFERENCE BOOKS

1. Ken Black, Applied Business Statistics, 7th Edition, Wiley India Edition, 2012.
2. David R. Anderson, Dennis J. Sweeney, Thomas A. Williams, Jeffrey D. Camm, James J. Cochran, Statistics for business and economics, 13th edition, Thomson (South – Western) Asia, Singapore,2016.
3. N. D. Vohra, Business Statistics, Tata McGraw Hill, 2017.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand and apply the concepts of probability distributions

CO2 To apply and analyse sampling techniques for research

CO3 To apply and analyse various parametric tests for hypothesis testing

CO4 To apply and analyse various non-parametric tests for hypothesis testing

CO5 To apply and analyse correlation, regression techniques

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	2	1	-	-	-	3	3	2	-
CO2	3	3	2	1	-	-	-	3	3	2	-
CO3	3	2	2	1	-	-	-	3	3	2	-
CO4	3	2	2	1	-	-	-	3	3	2	-
CO5	3	3	2	1	-	-	-	3	3	2	-

MB1101 MANAGEMENT CONCEPTS AND ORGANIZATIONAL BEHAVIOR

L	T	P	C
3	0	0	3

OBJECTIVES

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

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

Evolution of management Thought - Classical, Behavioral and Management Science Approaches Management - meaning, levels, management as an art or science, Managerial functions and Roles, Evolution of Management Theory - Classical era - Contribution of F. W. Taylor, Henri Fayol, Neo – Classical - Mayo & Hawthorne Experiments. Modern era – system & contingency approach Managerial Skills. **CO1**

UNIT II PLANNING AND ORGANISING **9**

Planning - Steps in Planning Process - Scope and Limitations - Forecasting and types of Planning - Characteristics of a sound Plan - Management by Objectives (MBO) - Policies and Strategies -Scope and Formulation - Decision Making - Types, Techniques and Processes. Organisation Structure and Design - Authority and Responsibility Relationships - Delegation of Authority and Decentralisation – Interdepartmental Coordination – Impact of Technology on Organisational design – Mechanistic vs Adoptive Structures -Formal and Informal Organisation. Control: meaning, function, Process and types of Control. **CO2**

UNIT III INDIVIDUAL BEHAVIOUR **9**

Meaning of Organizational behavior, contributing disciplines, importance of organizational behavior, Perception and Learning - Personality and Individual Differences - Motivation theories and Job Performance - Values, Attitudes and Beliefs – Communication Types - Process – Barriers – Making Communication Effective. **CO3**

UNIT IV GROUP BEHAVIOUR **9**

Groups and Teams: Definition, Difference between groups and teams, Stages of Group Development, Group Cohesiveness, Types of teams, Group Dynamics - Leadership – Styles -Approaches – Power and Politics – Organisational Structure – Organisational Climate and Culture, Conflict: concept, sources, Types, Stages of conflict, Management of conflict Organisational Change and Development. **CO4**

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

Comparative Management Styles and approaches - Japanese Management Practices Organisational Creativity and Innovation – Organizational behavior across cultures - Conditions affecting cross cultural organizational operations, Managing International Workforce, Productivity and cultural contingencies, Cross cultural communication, Management of Diversity. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. Stephen P. Robbins, David De Cenzo and Mary Coulter, Fundamentals of Management, Prentice Hall of India, 9th edition 2016.
2. Andrew J. Dubrin, Essentials of Management, Thomson Southwestern, 10th edition, 2016.
3. Samuel C. Certoand S. Trevis Certo, Modern Management: Concepts and Skills, Pearson education, 15th edition, 2018.
4. Charles W. L Hill and Steven L Mc Shane, Principles of Management, McGraw Hill Education, Special Indian Edition, 2017.

REFERENCE BOOKS

1. Harold Koontz and Heinz Weihrich, Essentials of Management: An International, Innovation, And Leadership Perspective, 10th edition, Tata McGraw – Hill Education, 2015.
2. Stephen P. Robbins, Timothy A. Judge, Organisational Behavior, PHIL earning / Pearson Education, 16th edition, 2014.
3. Fred Luthans, Organisational Behavior, McGraw Hill, 12th Edition, 2013.
4. Don Hellriegel, Susan E. Jackson and John W, Jr Slocum, Management: A competency – Based Approach, Thompson South Western, 11th edition, 2008.
5. Heinz Weihrich, Mark V Cannice and Harold Koontz, Management – Aglobal entrepreneurial perspective, Tata McGraw Hill, 12th edition, 2008

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understanding various management concepts and skills required in the business world
CO2 To apply knowledge of various functions of management in areal time management context
CO3 To understand the complexities associated with management of individual behavior in the organizations
CO4 To apply the skill set to manage group behaviour in Organizations
CO5 To evaluate the current trends in managing organizational behavior

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	2	1	-	-	-	3	3	2	-
CO2	3	2	2	1	-	-	-	3	3	2	-
CO3	3	2	2	1	-	-	-	3	3	2	-
CO4	3	2	2	1	-	-	-	3	3	2	-
CO5	3	3	2	1	-	-	-	3	3	2	-

MB1102	MANAGERIAL ECONOMICS	L	T	P	C
		3	0	0	3

OBJECTIVES

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

UNIT I INTRODUCTION **9**

The themes of economics – scarcity and efficiency – three fundamental economic problems – society's capability – Production possibility frontiers (PPF) – Productive efficiency Vs economic efficiency – economic growth & stability – Microeconomics and Macroeconomics – the role of markets and government – Positive Vs negative externalities. **CO1**

UNIT II CONSUMER AND PRODUCER BEHAVIOUR **9**

Market – Demand and Supply – Determinants – Market equilibrium – elasticity of demand and supply – consumer behaviour – consumer equilibrium – Approaches to consumer behaviour – Production – Short-run and long-run Production Function – Returns to scale – economies Vs diseconomies of scale – Analysis of cost – Short-run and long-run cost function – Relation between Production and cost function. **CO2**

UNIT III PRODUCT AND FACTOR MARKET **9**

Product market – perfect and imperfect market – different market structures – Firm's equilibrium and supply – Market efficiency – Economic costs of imperfect competition –factor market – Land, Labour and capital – Demand and supply – determination of factor price – Interaction of product and factor market – General equilibrium and efficiency of competitive markets. **CO3**

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

Macro – economic aggregates – circular flow of macroeconomic activity –National income determination – Aggregate demand and supply – Macroeconomic equilibrium – Components of aggregate demand and national income – multiplier effect – Demand side management – Fiscal policy in theory. **CO4**

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

Short – run and Long – run supply curve – Unemployment and its impact – Okun's law – Inflation and the impact – reasons for inflation – Demand Vs Supply factors –Inflation Vs Unemployment tradeoff – Phillips's curve – short-run and long-run – Supply side Policy and management - Money market - Demand and supply of money – money - market equilibrium and national income – the role of monetary policy. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. Paul A. Samuelson, William D. Nordhaus, Sudip Chaudhuri and Anindya Sen, Economics, 19thedition, Tata McGraw Hill, New Delhi, 2011
2. N. Gregory Mankiw, Principles of Economics, 8th edition, Thomson learning, New Delhi, 2017.

REFERENCE BOOKS

1. William Boyes and Michael Melvin, Textbook of economics, Biztantra, 7th edition 2008.
2. Richard Lipsey and Ale Chrystal, Economics, 13th edition, Oxford, University Press, New Delhi, 2015.
3. Karl E. Case and Ray C. Fair, Principles of Economics, 12th edition, Pearson, Education Asia, New Delhi, 2017.
4. Panneer selvam. R, Engineering Economics, 2nd Edition, PHIL earning, 2014.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the utility concepts of Micro and Macro Economics

CO2 To analyse the consumer and producer behaviours; production function and cost analysis
CO3 To apply, how factors of production can be used optimally to produce product and service and; to analyze market structure.
CO4 To evaluate the performance of an macro-economic activity and macro-economic environment
CO5 To understand economic policies that regulate economic veriables

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	2	1	-	-	3	3	3	2	-
CO2	3	3	2	1	-	-	3	3	3	2	-
CO3	3	2	2	1	-	-	3	3	3	2	-
CO4	3	2	2	1	-	-	3	3	3	2	-
CO5	3	3	2	1	-	-	3	3	3	2	-

MB1103 ACCOUNTING FOR MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES

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

UNIT I FINANCIAL ACCOUNTING **9**

Introduction to Financial, Cost and Management Accounting – Generally accepted accounting principles – Double Entry System – Preparation of Journal, Ledger and Trial Balance Preparation of Final Accounts: Trading, Profit and Loss Account and Balance Sheet – Reading the financial statements. **CO1**

UNIT II ANALYSIS OF FINANCIAL STATEMENTS **9**

Financial ratio analysis, Interpretation of ratio for financial decisions – DuPont Ratios – Comparative statements – common size statements. Cash flow (as per Accounting Standard 3) and Fund's flow statement analysis –Trend Analysis. **CO2**

UNIT III COST ACCOUNTING **9**

Cost Accounts – Classification of costs – Job cost sheet – Job order costing – Process costing (excluding Interdepartmental Transfers and equivalent production) – Joint and By Product Costing – Activity Based Costing, Target Costing. **CO3**

UNIT IV MARGINAL COSTING **9**

Marginal Costing and profit planning – Cost, Volume, Profit Analysis – Break Even Analysis – Decision making problems -Make or Buy decisions -Determination of sales mix - Exploring new markets - Add or drop products -Expand or contract. **CO4**

UNIT V BUDGETING AND VARIANCE ANALYSIS **9**

Budgetary Control – Sales, Production, Cash flow, fixed and flexible budget – Standard costing and Variance Analysis – (excluding overhead costing) - Accounting standards and accounting disclosure practices in India. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. M. Y. Khan & P. K. Jain, Management Accounting, Tata McGraw Hill, 8th edition, 2018.
2. T. S. Reddy & A. Murthy, Financial Accounting, Margham Publications, 2014

3. M. Y. Khan & P. K. Jain, Management Accounting, Tata McGraw Hill, 8th edition, 2018.

REFERENCE BOOKS

1. Jan Williams, Susan Haka, Mark Sbettner, Joseph V Carcello, Financial and Managerial Accounting The basis for business Decisions, 18th edition, Tata McGraw Hill Publishers, 2017
2. Charles T. Horngren, Gary L. Sundem, David Burgstahler, Jeff Schatzberg, Introduction to Management Accounting, PHIL earning, 2014, 16th edition.
3. Earl K. Stice & James D. Stice, Financial Accounting, Reporting and Analysis, 8th edition, Cengage Learning, 2015.
4. N. M. Singhvi, Ruzbeh J. Bodhanwala, Management Accounting–Text and cases, 3rd edition PHIL earning, 2018
5. Ashish K. Battacharya, Introduction to Financial Statement Analysis, Elsiever, 2012.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 Ability to remember and understand the financial accounting concepts.
CO2 Ability to understand the financial statement analysis.
CO3 To apply and analyse the cost accounting techniques
CO4 To apply the marginal costing and profit planning techniques.
CO5 To analyse and evaluate the cost and management accounting techniques like budgeting, standard costing and variance analysis.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	2	2	-	-	-	3	3	2	-
CO2	3	3	2	2	-	-	-	3	3	2	-
CO3	3	2	2	2	-	-	-	3	3	2	-
CO4	3	2	2	2	-	-	-	3	3	2	-
CO5	3	3	2	2	-	-	-	3	3	2	-

MB1104 LEGAL ASPECTS OF BUSINESS L T P C
3 0 0 3

OBJECTIVES

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

UNIT I COMMERCIAL LAW **9**

THE INDIAN CONTRACT ACT1872: Definition of contract, essentials elements and types of a contract, Formation of a contract, performance of contracts, breach of contract and its remedies, Quasi contracts – Contract of Agency: Nature of agency, Creation and types of agents, Authority and liability of Agent and principal: Rights and duties of principal and agents, termination of agency. **CO1**

THE SALE OF GOODS ACT 1930: Nature of Sales contract, Documents of title, risk of loss,

Guarantees and Warranties, performance of sales contracts, conditional sales and rights of an unpaid seller-

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

UNIT II COMPANY LAW **9**

COMPANY ACT 1956&2013 Major principles – Nature and types of companies, Formation, Memorandum and Articles of Association, Prospectus, Power, duties and liabilities of Directors, winding up of companies, Corporate Governance. **CO2**

UNIT III INDUSTRIAL LAW **9**

An Overview of Factories Act – Payment of Wages Act – Payment of Bonus Act – Industrial Disputes Act. **CO3**

UNIT IV CORPORATE TAX & GST **9**

Corporate Tax Planning, Corporate Taxes and Overview of Latest Developments in Indirect tax Laws relating to GST: An introduction including constitutional aspects, Levy and collection of CGST & IGST, Basic concept of time and value of supply, Input tax credit, Computation of GST Liability, Registration, Tax Invoice, Credit & Debit Notes, Electronic Way bill, Returns, Payment of taxes including Reverse Charge. **CO4**

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

Consumer Protection Act – Consumer rights, Procedures for Consumer grievances redressal, Types of consumer Redressal Machineries and Forums - Cyber-crimes, IT Act 2000 and 2002, Cyber Laws. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. N. D. Kapoor, Elements of Mercantile Law, Sultan Chand and Company, India, 2017.
2. P. K. Goel, Business Law for Managers, Biztantatara Publishers, India, 2017.
3. Akhileshwar Pathak, Legal Aspects of Business, Tata McGraw Hill, 6th Edition, 2018.

REFERENCE BOOKS

1. Ravinder Kumar, Legal Aspects of Business, New Delhi: Cengage Learning, 4th edition, 2016.
2. Sinha P. K, Dr. Vinod Singhania, Text Book of Indirect Tax, Taxman Publication, New Delhi.
3. Taxmann, GST Manual with GST Law Guide & Digest of Landmark Rulings, 11th Edition, 2019
4. P. P. S. Gogna, Mercantile Law, S. Chand &Co. Ltd., India, Fourth Edition, 2015.
5. Richard Stim, Intellectual Property - Copy Rights, Trade Marks, and Patents, Cengage Learning,15th edition 2017.
6. Daniel Albuquerque, Legal Aspect of Business, Oxford, 2nd edition, 2017
7. Ravinder Kumar, Legal Aspect of Business, Cengage Learning, 4th Edition 2016.
8. V. S. Datey, GST Ready Reckoner, 9th edition, 2019

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the provisions of the law of contract, sale of goods act and negotiable instruments act

CO2 To remember the various forms of companies' origin and winding up procedures with the elements of corporate governance.

CO3 To understand the various provisions of labor law and industrial environment

CO4 Ability to understand the fundamental concepts of corporate tax and GST

CO5 To analyze the various forms of consumer complaints, and cybercrimes and use the legal provisions for redressal and avoid it.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	1	2	2	-	-	1	3	3	2	1
CO2	3	1	2	2	-	-	1	3	3	2	1
CO3	3	1	2	2	-	-	1	3	3	2	1
CO4	3	1	2	2	-	-	1	3	3	2	1
CO5	3	1	2	2	-	-	1	3	3	2	1

MB1105 INFORMATION MANAGEMENT **L T P C**
3 0 0 3

OBJECTIVES

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

UNIT I INTRODUCTION **9**

Data, Information, Information System, evolution, types based on functions and hierarchy, Enterprise and functional information systems. **CO1**

UNIT II SYSTEM ANALYSIS AND DESIGN **10**

System development methodologies, Systems Analysis and Design, Data flow Diagram (DFD), Decision table, Entity Relationship (ER), Object Oriented Analysis and Design (OOAD), UML diagram. **CO2**

UNIT III INTRODUCTION TO DATA BASE MANAGEMENT SYSTEMS **8**

DBMS – types and evolution, RDBMS, OODBMS, RODBMS, Data warehousing, Data Mart, Data mining. **CO3**

UNIT IV INTEGRATED SYSTEMS, SECURITY AND CONTROL **9**

Knowledge based decision support systems, integrating social media and mobile technologies in Information system, Security, IS Vulnerability, Disaster Management, Computer Crimes, Securing the Web. **CO4**

UNIT V NEW IT INITIATIVES **9**

Introduction to Deep learning, Big data, Pervasive Computing, Cloud computing, Advancements in AI, IoT, Block chain, Crypto currency, Quantum computing. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. Rahul de, MIS in Business, Government and Society, Wiley India Pvt Ltd, 2012
2. Gordon Davis, Management Information System : Conceptual Foundations, Structure and Development, Tata McGraw Hill, 21st Reprint 2008.
3. Haag, Cummings and Mc Cubbrey, Management Information Systems for the Information Age, McGraw Hill, 2005. 9th edition, 2013.

REFERENCE BOOKS

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

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the basics of data and information system.
CO2 To apply the system development methodologies.
CO3 To analyse how database management system and its types helps to the information management.
CO4 To evaluate the various technologies in information system and its security.
CO5 To gain knowledge on effective applications of information systems in business.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	1	2	2	1	1	1	3	3	3	1
CO2	3	1	2	2	1	1	1	3	3	3	1
CO3	3	1	2	2	1	1	1	3	3	3	1
CO4	3	1	2	2	1	1	1	3	3	3	1
CO5	3	1	2	2	1	1	1	3	3	3	1

MB1106 RESEARCH METHODOLOGY AND IPR

L	T	P	C
3	0	0	3

OBJECTIVES

- To make the students understand the principles of scientific methodology in research enquiry, develop analytical skills of research, to prepare scientific reports and help them to get patent and copy right of their research work.

UNIT I INTRODUCTION **9**

Business Research – Definition and Significance – the research process – Types of Research – Exploratory and causal Research – Theoretical and empirical Research – Cross –Sectional and time – series Research – Research questions / Problems – Research objectives – Research hypotheses – characteristics – Research in an evolutionary perspective – the role of theory in research. **CO1**

UNIT II RESEARCH DESIGN AND MEASUREMENT **9**

Research design – Definition – types of research design – exploratory and causal research design – Descriptive and experimental design – different types of experimental design – Validity of findings – internal and external validity – Variables in Research – Measurement and scaling – Different scales – Construction of instrument – Validity and Reliability of instrument. **CO2**

UNIT III DATA COLLECTION AND SAMPLING DESIGN **9**

Types of data – Primary Vs Secondary data – Methods of primary data collection – Survey Vs Observation – Experiments – Construction of questionnaire and instrument – Validation of questionnaire – Sampling plan – Sample size – determinants optimal sample size – sampling techniques – Probability Vs Non–probability sampling methods. **CO3**

UNIT IV DATA ANALYSIS AND REPORT WRITING **9**

Data Preparation – editing – coding –data entry – data analyses – parametric and non-parametric techniques - applications of bivariate and multivariate statistical techniques. Research report – contents of report – executive summary – types of report - ethics in research. **CO4**

UNIT V INTELLECTUAL PROPERTY RIGHTS ACT **9**

IPR – meaning - objectives - types of IPR – Patent, Copy right, Trademark – Procedure for registration – offence & penalties. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. Donald R. Cooper, Pamela S. Schindler and J K Sharma, Business Research methods, 12th Edition, Tata Mc Graw Hill, New Delhi, 2018.
2. Alan Bryman and Emma Bell, Business Research methods, 5th Edition, Oxford University Press, New Delhi, 2018.
3. William G Zikmund, Barry J Babin, Jon C. Carr, Atanu Adhikari, Mitch Griffin, Business Research methods, A South Asian Perspective, 8th Edition, Cengage Learning, New Delhi, 2016.
4. V K Ahuja, Law Relating to Intellectual Property Rights 3rd edition 2017, Publisher: LexisNexis, Universal bookstores, India.
5. Anil Kumar H S, Ramakrishna B, Fundamentals of Intellectual Property Rights, 2017 Notion press

REFERENCE BOOKS

1. Wilson, J (2013), Essential of Research Methods, SAGE Publication.
2. Lee, Nick & Lings, Ian (2009), Doing Business Research, Sage South Asia.
3. Mark Saunders, Lewis, P. & Thornhill, A. (2015), Research Methods for Business Students, Pearson Education,
4. Nithyananda, K V. (2019). Intellectual Property Rights: Protection and Management. India, IN: Cengage Learning India Private Limited.
5. Neeraj, P., & Khusdeep, D. (2014). Intellectual Property Rights. India, IN: PHI learning Private Limited.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the types and process of research and to create the research objectives and hypothesis.

CO2 To apply the types of research design, measurement and scaling; to create the instrument and evaluate the validity and reliability of instrument.

CO3 To determine the types of data, sample size; applying the probability vs non–probability sampling techniques

CO4 To analyse data using parametric and non-parametric techniques; prepare the research reports.

CO5 To understand IPR and to get patent and copy right for research work

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	2	1	2	-	3	3	3	-
CO2	3	3	3	2	1	2	-	3	3	3	1
CO3	3	3	3	2	1	2	-	3	3	3	-
CO4	3	3	3	2	1	2	-	3	3	3	-
CO5	3	3	3	2	1	2	-	3	3	3	3

SEMINAR - 1

MB1107 INDIAN ETHOS AND BUSINESS ETHICS

L	T	P	C
0	0	4	2

OBJECTIVES

- To enable the learners in understanding of the basic concepts of Indian Ethos and familiarize about ethical behaviour and value systems at work.
- To enable the learners to have exposure on business ethics and ethical business perspectives.

NOTE:

- The following is the list of topics suggested for preparation and presentation by students twice during the semester.
- This will be evaluated by the faculty member(s) handling the course and the final marks are consolidated at the end of the semester. No end semester examination is required for this course.

1. Indian Ethos and Personality Development
2. Work ethos and values for Professional Managers
3. Indian Values, Value Systems and Wisdom for modern managers
4. Management Lessons from the Vedas, Puranas, Indian religions
5. Spirituality in Business Management
6. Individual Culture and Ethics
7. Ethical codes of conduct and value Systems
8. Loyalty and Ethical Behaviour
9. Ethical business issues and solutions
10. Social Responsibilities of Business

TOTAL: 60 PERIODS

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the basic concepts of Indian Ethos
CO2 To apply work ethos and values based on cultural differences
CO3 To determine the basic sources of Indian ethos and values
CO4 The apply the Indian Systems of learning in work place
CO5 The understand the Indian Heritage and its application in CSR

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	2	1	1	1	1	3	2	2	-
CO2	2	2	2	1	1	1	1	3	2	2	-
CO3	2	2	2	1	1	1	1	3	2	2	-
CO4	2	2	2	1	1	1	1	3	2	2	-
CO5	2	2	2	1	1	1	1	3	2	2	-

MB1108 BUSINESS COMMUNICATION (LABORATORY)

L	T	P	C
0	0	4	2

OBJECTIVES

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

UNIT I INTRODUCTION AND TYPES OF BUSINESS COMMUNICATION

Introduction to Business Communication: Principles of effective communication, Target group profile, Barriers of Communication, Reading Skills, Listening, Feedback - Principles of Nonverbal Communication: Professional dressing and body language. Role Playing, Debates and Quiz. Types of managerial speeches - Presentations and Extempore - speech of introduction, speech of thanks, occasional speech, theme speech - Group communication: Meetings, group discussions – Other Aspects of Communication: Cross Cultural Dimensions of Business Communication Technology and Communication, Ethical & Legal Issues in Business Communication. **CO1 9**

UNIT II BUSINESS COMMUNICATION WRITING MODELS AND TOOLS

Business letters, Routine letters, Bad news and persuasion letters, sales letters, collection letters, Maintaining a Diary, Resume / CV, job application letters, proposals. Internal communication through - notices, circulars, memos, agenda and minutes, reports. Case Studies. Exercises on Corporate Writing, Executive Summary of Documents, Creative Writing, Poster Making, Framing Advertisements, Slogans, Captions, Preparing Press Release and Press Notes. **CO2 9**

UNIT III EFFECTIVE PRESENTATIONS

Principles of Effective Presentations, Principles governing the use of audio-visual media. **CO3 9**

UNIT IV INTERVIEW SKILLS

Mastering the art of giving interview sin-selection or placement interviews, discipline interviews, appraisal interviews, exit interviews, web / video conferencing, tele-meeting. **CO4 9**

UNIT V REPORT WRITING

Objectives of report, types of report, Report Planning, Types of Reports, developing an outline, Nature of Headings, Ordering of Points, Logical Sequencing, Graphs, Charts, Executive Summary, List of Illustration, Report Writing. **CO5 9**

TOTAL: 60 PERIODS

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

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

Practical-Module2-This module builds on the foundation of Business Communication and creates opportunities for students to strengthen their oral and written communication. Students will be required to enhance their presentation skills through impromptu speeches. Students will also learn how to prepare a formal business report. Job hunting and employment skills will be introduced to prepare students for a positive start to their careers. Students will be taught to write application letters and resumes. Additionally, students will learn job interview techniques through role-plays and simulations

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

REFERENCE BOOKS

1. Rajendra Pal, J.S. Korlahalli, Essentials of Business Communication by, Sultan Chand & Sons, 13th Edition.
2. Meenakshi Raman, Prakash Singh, Business Communication, Oxford, 2nd edition, 2012
3. Raymond V. Lesikar, Flatley, Basic Business Communication Skills for Empowering the Internet Generation by, M.E., TMGH, New Delhi,10th edition, 2004
4. Ludlow R, Panton, The Essence of Effective Communications, Prentice Hall of India Pvt. Ltd. 2, 1995
5. C.S. Rayadu, Communication by, HPH, 2015
6. R.C. Sharma, Krishna Mohan, Business Correspondence & Report Writing, Tata McGraw Hill, 5th Edition, 2017
7. Malcolm Goodale, Developing Communication Skills, 2nd Edition Professional Presentations, Cambridge University Press
8. Supplementary Reading Material Business Communication – Harvard Business Essentials Series, HBS Press
9. Adair, J, Effective Communication, Pan Macmillan Excellence in Business Communication by Thill, J. V. & Bovee, G. L, McGraw Hill, New York.
10. Business Communications: From Process to Product by Bowman, J.P. & Branchaw, P.P., Dryden Press, Chicago.
11. **WEBSITES:**
    www.businesscommunicationskills.com
    www.kcitraining.com
    www.mindtools.com
    www.businesscmmunication.org

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To apply managerial communication skills
CO2 Ability to excel in different forms of written communication required in a business context
CO3 Develop good presentation skills
CO4 In-depth understanding of interview skills
CO5 To prepare Business reports

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	-	2	2	2	2	-	3	3	2	-
CO2	2	-	2	2	2	2	-	3	3	2	-
CO3	2	-	2	2	2	2	-	3	3	2	-
CO4	2	-	2	2	2	2	-	3	3	2	-
CO5	2	-	2	2	2	2	-	3	3	2	-

MB1201 QUANTITATIVE TECHNIQUES FOR DECISION MAKING

L	P	T	C
3	0	0	3

OBJECTIVES

- To learn the fundamentals of Quantitative techniques in decision making
- To understand the application of Linear Programming Extensions
- To understand the fundamentals of decision and Game Theories
- To understand the role of inventory and Job Sequencing Models
- To get knowledge about the machine translation

UNIT I INTRODUCTION TO LINEAR PROGRAMMING (LP) **9**

Relevance of quantitative techniques in management decision making. Linear Programming - formulation, solution by graphical and simplex methods (Primal - Penalty, Two Phase), Special cases. Sensitivity Analysis. **CO1**

UNIT II LINEAR PROGRAMMING EXTENSIONS **9**

Transportation Models (Minimising and Maximising Problems) – Balanced and unbalanced Problems – Initial Basic feasible solution by N - W Corner Rule, Least cost and Vogel's approximation methods. Check for optimality. Solution by MODI / Stepping Stone method. Case of Degeneracy. Transshipment Models. Assignment Models (Minimising and Maximising Problems) – Balanced and Unbalanced Problems. Solution by Hungarian and Branch and Bound Algorithms. Travelling Salesman problem. Crew Assignment Models. **CO2**

UNIT III DECISION AND GAME THEORIES **9**

Decision making under risk – Decision trees – Decision making under uncertainty. Game Theory – Two-person Zero sum games - Saddle point, Dominance Rule, Convex Linear Combination (Averages), methods of matrices, graphical and LP solutions. **CO3**

UNIT IV INVENTORY AND JOB SEQUENCING MODELS **9**

Inventory Models –EOQ and EBQ Models (With and without shortages), Quantity Discount Models. Job Sequencing algorithm (Johnson') - n jobs thro' 2 machines, n jobs thro' 3 machines and n jobs thro' m machines. **CO4**

UNIT V QUEUING THEORY AND REPLACEMENT MODELS **9**

Queuing Theory – single and Multi – channel models –infinite number of customers and infinite calling source. Replacement Models – Individuals replacement Models (With and without time value of money) – Group Replacement Models. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. N. D Vohra, Quantitative Techniques in Management, Tata Mcgraw Hill, 2010.
2. Paneerselvam R., Operations Research, Prentice Hall of India, Fourth Print, 2008.
3. Hamdy A Taha, Introduction to Operations Research, Prentice Hall India, Tenth Edition, Third Indian Reprint 2019.

REFERENCE BOOKS

1. Bernard W. Taylor III, Introduction to Management Science, 9th Edition, Pearson Ed.
2. Frederick & Mark Hillier, Introduction to Management Science– A Modeling and case studies approach with spread sheets, Tata Mcgraw Hill,2010.
3. Nagraj B, Barry Rand Ralph M. S Jr., Managerial Decision Modelling with Spreads sheets, Second Edition, 2007, Pearson Education

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the fundamentals of linear programming and applying in real world situations for decision making

CO2	To apply the transportation and assignment models and to analyze the optimal allocation for Minimization of Cost
CO3	To apply the strategies in competitive real-world phenomena using concepts from game theory.
CO4	To analyze the efficiency of job sequencing models to minimize production time and costs
CO5	To apply and analyze the appropriate queuing models and optimal replacement period/policy for a given item/equipment/machine.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	-	3	-	-	-	-	3	3	3	-
CO2	3	-	3	-	-	-	-	3	3	3	-
CO3	3	-	3	-	-	-	-	3	3	3	-
CO4	3	-	3	-	-	-	-	3	3	3	-
CO5	3	-	3	-	-	-	-	3	3	3	-

MB1202 FINANCIAL MANAGEMENT

L	P	T	C
3	0	0	3

OBJECTIVES

- To learn the fundamentals of Finance
- To understand the importance of Investment Decisions
- To understand the fundamentals of Financing and Dividend Decision
- To understand the role of working capital management
- To understand the long-term sources of finance

UNIT I FOUNDATIONS OF FINANCE **9**

Introduction to finance – Financial Management – Nature, scope and functions of Finance, organization of financial functions, objectives of Financial management, Major financial decisions – Time value of money – features and valuation of shares and bonds – Concept of risk and return – single asset and of a portfolio. **CO1**

UNIT II INVESTMENT DECISIONS **9**

Capital Budgeting: Principles and techniques – Nature of capital budgeting – Identifying relevant cash flows - Evaluation Techniques: Payback, Accounting rate of return, Net Present Value, Internal Rate of Return, Profitability Index - Comparison of DCF techniques -Concept and measurement of cost of capital – Specific cost and overall cost of capital. **CO2**

UNIT III FINANCING AND DIVIDEND DECISION **9**

Leverages – Operating and Financial leverage – measurement of leverages – degree of Operating & Financial leverage – Combined leverage, EBIT– EPS Analysis – Indifference point. Capital structure – Theories – Net Income Approach, Net Operating Income Approach, MM Approach – Determinants of Capital structure. Dividend decision – Issues in dividend decisions, Importance, Relevance & Irrelevance theories - Walter's – Model, Gordon's model and MM model – Factors determining dividend policy – Types of dividend policies– forms of dividend. **CO3**

UNIT IV WORKING CAPITAL MANAGEMENT **9**

Principles of working capital: Concepts, Needs, Determinants, issues and estimation of working **CO4**

capital – Receivables Management - Inventory management – Cash management – Working capital finance: Commercial paper, Company deposit, Trade credit, Bank finance.

UNIT V LONG TERM SOURCES OF FINANCE **9**

Indian capital market – New issues market – Secondary market – Long-term finance: Shares, debentures and term loans, lease, hire purchase, venture capital financing, Private Equity. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. IM. Pandey Financial Management, Vikas Publishing House Pvt. Ltd., 11th edition, 2018
2. M.Y. Khan and P.K. Jain Financial management, Text, Problems and cases Tata McGraw Hill, 8th edition, 2017.
3. Aswath Damodaran, Corporate Finance Theory and practice, John Wiley & Sons, 2011.

REFERENCE BOOKS

1. James C. Vanhorne –Fundamentals of Financial Management – PHI Learning, 13th Edition, 2014.
2. Brigham, Ehrhardt, Financial Management Theory and Practice, 14th edition, Cengage Learning 2015.
3. Prasanna Chandra, Financial Management, 9th edition, Tata McGraw Hill, 2017.
4. Srivatsava, Mishra, Financial Management, Oxford University Press, 2012.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To remember the basic concepts of financial management such as decisions and functions of financial management

CO2 To understand the long term investment techniques like payback period, accounting rate of return, net present value.

CO3 To apply the concepts of dividend and examine impact of dividend policy of a firm.

CO4 To analyse the different forms components of working capital such as receivables, payables, inventory etc.

CO5 To evaluate getting exposure of long term sources of fund namely debenture, term loans, private equity, venture capital etc.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	3	-	-	-	3	3	-	-
CO2	3	3	3	3	-	-	-	3	3	-	-
CO3	3	3	3	3	-	-	-	3	3	-	-
CO4	3	3	3	3	-	-	-	3	3	-	-
CO5	3	3	3	3	-	-	-	3	3	-	-

MB1203	HUMAN RESOURCE MANAGEMENT	L	P	T	C
		3	0	0	3

OBJECTIVES

- To learn the basic concepts of Human Resource Management
- To understand the importance of Human Resource Planning and Recruitment
- To understand the fundamentals and importance of Training and Development
- To understand the intricacies in Employee Engagement
- To understand the importance of Performance Evaluation and Control

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

Evolution of human resource management – The importance of the human capital – Role of human resource manager – Challenges for human resource managers - trends in Human resource policies – Computer applications in human resource management – Human resource accounting and audit. **CO1**

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

Importance of Human Resource Planning – Forecasting human resource requirement – matching supply and demand – Internal and External sources – Organizational Attraction - Recruitment, Selection, Induction and Socialization - Theories, Methods and Process. **CO2**

UNIT III TRAINING AND DEVELOPMENT **9**

Types of training methods – purpose – benefits - resistance. Executive development programme – Common practices – Benefits – Self-development – Knowledge management. **CO3**

UNIT IV EMPLOYEE ENGAGEMENT **9**

Compensation plan – Reward – Motivation – Application of theories of motivation – Career management – Mentoring - Development of mentor – Protégé relationships- Job Satisfaction, Employee Engagement, Organizational Citizenship Behavior: Theories, Models. **CO4**

UNIT V PERFORMANCE EVALUATION AND CONTROL **9**

Method of performance evaluation – Feedback – Industry practices. Promotion, Demotion, Transfer and Separation – Implication of job change. The control process – Importance – Methods – Requirement of effective control systems grievances –Causes – Implications – Redressal methods. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Gary Dessler and Biju Varkkey, Human Resource Management,14th Edition, Pearson Education Limited, 2015.
2. David A. Decenzo, Stephen. P. Robbins, and Susan L. Verhulst, Human Resource Management, Wiley, International Student Edition, 11th Edition, 2014.
3. Luis R. Gomez - Mejia, David B. Balkin, Robert L Cardy. Managing Human Resource. PHI Learning. 2012

REFERENCE BOOKS

1. Bernadin, Human Resource Management, Tata McGraw Hill, 8th edition 2012.
2. Wayne Cascio, Managing Human Resource, McGraw Hill, 2015.
3. Ivancevich, Human Resource Management, McGraw Hill 2012.
4. Uday Kumar Haldar, Juthika Sarkar. Human Resource management. Oxford. 2012

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the various aspects of HR

CO2 To analyse the human resource requirements and; to evaluate and create recruitment, selection,

induction and socialization process.

CO3 To analyse, evaluate and create training and executive development programmes

CO4 To analyse mentoring, protégé relationships, job satisfaction, organizational citizenship behavior and; to create compensation plan, career management and employee engagement

CO5 To create a good performance appraisal system and grievance redressal methods

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	2	-	-	-	1	3	3	1	1
CO2	3	3	2	1	-	1	1	3	3	1	1
CO3	3	3	2	1	-	1	1	3	3	1	1
CO4	3	3	2	1	1	1	1	3	3	1	1
CO5	3	3	2	1	1	1	1	3	3	1	1

MB1204 OPERATIONS MANAGEMENT

L	P	T	C
3	0	0	3

OBJECTIVES

- To learn the basic concepts of Operations Management
- To understand the importance of Operations and the value chain
- To understand concepts of Designing Operations
- To understand the importance of Planning and Control
- To understand the importance of Quality Management

UNIT I INTRODUCTION TO OPERATIONS MANAGEMENT **9**

Operations Management – Nature, Importance, historical development, transformation processes, differences between services and goods, a system perspective, functions, challenges, current priorities, recent trends. Operations Strategy – Strategic fit, framework. Productivity; World-class manufacturing practices **CO1**

UNIT II OPERATIONS AND THE VALUE CHAIN **9**

Capacity Planning – Long range, Types, Developing capacity alternatives, tools for capacity planning. Facility Location–Theories, Steps in Selection, Location Models. Sourcing and procurement-Strategic sourcing, make or buy decision, procurement process, managing vendors **CO2**

UNIT III DESIGNING OPERATIONS **9**

Product Design-Criteria, Approaches. Product development process-stage-gate approach tools for efficient development Process- design, strategy, types, analysis. Facility Layout–Principles, Types, Planning tools and techniques. **CO3**

UNIT IV PLANNING AND CONTROL OF OPERATIONS **9**

Demand Forecasting–Need, Types, Objectives and Steps- Overview of Qualitative and Quantitative methods. Operations planning-Resource planning-Inventory Planning and Control. Operations Scheduling- Theory of constraints-bottle necks, capacity constrained resources, synchronous **CO4**

UNIT V QUALITY MANAGEMENT **9**

Definitions of quality, The Quality revolution, quality gurus; TQM philosophies; Quality management tools, certification and awards. Lean Management - philosophy, elements of JIT **CO5**

manufacturing, continuous improvement. Six sigma's.

TOTAL : 45 PERIODS

TEXT BOOKS

1. Richard B. Chase, Ravi Shankar, F. Robert Jacobs, Operations and Supply Chain Management, McGraw Hill Education (India) Pvt. Ltd,14th Edition, 2014.
2. Mahadevan B, Operations management: Theory and practice. Pearson Education India; 2015
3. William J Stevenson, Operations Management, Tata McGraw Hill, 9th Edition, 2009.
4. Russel and Taylor, Operations Management, Wiley, 5th Edition, 2006.

REFERENCE BOOKS

1. Norman Gaither and Gregory Frazier, Operations Management, South Western Cengage Learning, 9th edition, 2015.
2. Cecil C. Bozarth, Robert B. Handfield, Introduction to Operations and Supply Chain
3. Management, Pearson, 4th Edition, 2016.
4. Panneerselvam. R, Production and Operations Management, 3rd Edition, PHI Learning, 2012

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the basic concepts of operations management, its evolution, recent trends and challenges, and apply the techniques to improve productivity and ensure world class manufacturing.

CO2 To understand the issues involved in various level of operations planning and analyse the elements involved in product, process and services that add value to customers.

CO3 To understand the elements to be addressed in designing product, process, services and facilities and create the best of them.

CO4 To analyse the demand for product and services using quantitative and qualitative techniques and evaluate and find the requirement of inventory level and creating suitable inventory plan.

CO5 To remember and understand the various quality tools and techniques to create best product and services.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	2	1	-	-	1	3	3	2	-
CO2	3	3	2	1	-	-	1	3	3	2	-
CO3	3	3	2	1	-	-	1	3	3	2	-
CO4	3	3	2	1	-	-	1	3	3	2	-
CO5	3	3	2	1	-	-	1	3	3	2	-

MB1205 MARKETING MANAGEMENT

L	P	T	C
3	0	0	3

OBJECTIVES

- To learn the fundamentals of Marketing Management
- To understand the strategy followed in marketing
- To understand the fundamentals of marketing mix decisions

- To understand the role of buyer behaviour
- To understand the concepts of Marketing research & recent trends in marketing

UNIT I INTRODUCTION **9**

Defining Marketing – Core concepts in Marketing – Evolution of Marketing – Marketing Planning Process – Scanning Business environment: Internal and External – Value chain – Core Competencies – PESTEL − SWOT Analysis − Marketing interface with other functional areas– Production, Finance, Human Relations Management, Information System – Marketing in global environment – International Marketing – Rural Marketing−Prospects and Challenges. **CO1**

UNIT II MARKETING STRATEGY **9**

Marketing strategy formulations – Key Drivers of Marketing Strategies - Strategies for Industrial Marketing – Consumer Marketing − Services marketing – Competition Analysis − Analysis of consumer and industrial markets – Influence of Economic and Behavioral Factors−Strategic Marketing Mix components. **CO2**

UNIT III MARKETING MIX DECISIONS **9**

Product planning and development – Product life cycle – New product Development and Management – Defining Market Segmentation – Targeting and Positioning − Brand Positioning and Differentiation – Channel Management – Managing Integrated Marketing Channels – Managing Retailing, Wholesaling and Logistics − Advertising and Sales Promotions – Pricing Objectives, Policies and Methods **CO3**

UNIT IV BUYER BEHAVIOUR **9**

Understanding Industrial and Consumer Buyer Behavior−Influencing factors – Buyer Behaviour Models – Online buyer behavior – Building and measuring customer satisfaction – Customer relationships management – Customer acquisition, Retaining, Defection – Creating Long Term Loyalty Relationships. **CO4**

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

Marketing Information System–Marketing Research Process–Concepts and applications: Product – Advertising – Promotion – Consumer Behaviour – Retail research –Customer driven organizations - Cause related marketing − Ethics in marketing – Online marketing trends – social media and digital marketing **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Philip T. Kotler and Kevin Lane Keller, Marketing Management, Prentice Hall India,15th Edition,2017.
2. K S Chandra sekar, "Marketing management – Text and Cases", Tata Mc Graw Hill Education,2012
3. Lamb, Hair, Sharma, McDaniel – Marketing –An Innovative
4. Approach to learning and teaching - A south Asian perspective, Cengage Learning,2012.
5. Paul Baines, Chris Fill, Kelly Page, Marketing, Asian edition, Oxford University Press,5th edition,2019.

REFERENCE BOOKS

1. Ramasamy, V. S, Namakumari, S, Marketing Management: Global Perspective Indian Context, Macmillan Education, New Delhi, 6th Edition, 2018.
2. A. NAG, Marketing successfully – A Professional Perspective, Macmillan 2008.
3. Micheal R. Czinkota, Masaaki Kotabe, Marketing Management, Vikas Thomson Learning,2nd edition 2006.
4. Philip Kotler, Gay Armstrong, Prafulla Agnihotri, Principles of marketing, 7thedition,2018.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the fundamentals in marketing
CO2 To apply the marketing strategies followed in organizations
CO3 To analyse the applications marketing mix decisions
CO4 To evaluate the buyer behavior in marketing
CO5 To analyse and evaluate the applications of marketing research & trends in marketing

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3		3	-	-	-	1	3	3	3	-
CO2	3		3	-	-	-	1	3	3	3	-
CO3	3		3	-	-	-	1	3	3	3	-
CO4	3		3	-	-	-	1	3	3	3	-
CO5	3		3	-	-	-	1	3	3	3	1

MB1206 BUSINESS ANALYTICS

L	P	T	C
3	0	0	3

OBJECTIVES

- To learn the fundamentals of Business Analytics
- To understand the importance of Resource Management in business Analytics
- To understand the fundamentals of Descriptive Analysis
- To understand the role of Predictive Analysis
- To understand the concepts of Prescriptive Analysis

UNIT I INTRODUCTION TO BUSINESS ANALYTICS (BA) **9**

Business Analytics- Terminologies, Process, Importance, Relationship with Organisational Decision Making, BA for Competitive Advantage. **CO1**

UNIT II MANAGING RESOURCES FOR BUSINESS ANALYTICS **9**

Managing BA Personnel, Data and Technology. Organisational Structures aligning BA. Managing Information policy, data quality and change in BA. **CO2**

UNIT III DESCRIPTIVE ANALYTICS **9**

Introduction to Descriptive analytics - Visualizing and Exploring Data - Descriptive Statistics – Sampling and Estimation – Probability Distribution for Descriptive Analytics – Analysis of Descriptive analytics **CO3**

UNIT IV PREDICTIVE ANALYTICS **9**

Introduction to Predictive analytics – Logic and Data Driven Models – Predictive Analysis Modeling and procedure – Data Mining for Predictive analytics. Analysis of Predictive analytics **CO4**

UNIT V PRESCRIPTIVE ANALYTICS **9**

Introduction to Prescriptive analytics – Prescriptive Modeling – Non Linear Optimisation – Demonstrating Business Performance Improvement. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Marc J. Schniederjans, Dara G. Schniederjans and Christopher M. Starkey, "Business Analytics Principles, Concepts, and Applications-What, Why, and How", Pearson,2014
2. Christian Albright Sand Wayne L. Winston, "Business Analytics-Data Analysis and Decision Making", Fifth edition, Cengage Learning, 2015.

REFERENCE BOOKS

1. James R. Evans, "Business Analytics - Methods, Models and Decisions", Pearson Ed,2012.
2. Newbold, Carlson, Thorne – Statistics for Business and Economics, 6th ed., Pearson
3. S. C.Gupta – Fundamentals of Statistics, Himalaya Publishing
4. Walpole – Probability and Statistics for Scientists and Engineers, 8th ed., Pearson

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the fundamentals of Business Analytics
CO2 To evaluate and manage resources for business Analytics
CO3 To apply descriptive analysis
CO4 To apply Predictive Analysis
CO5 To analyse and evaluate the applications of Prescriptive Analytics

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	1	-	-	-	3	3	2	-
CO2	3	3	3	1	-	-	-	3	3	2	-
CO3	3	3	3	1	-	-	-	3	3	2	-
CO4	3	3	3	1	-	-	-	3	3	2	-
CO5	3	3	3	1	-	-	-	3	3	2	-

MB1207 PRO-SOCIAL BEHAVIOUR

L	P	T	C
0	0	4	2

OBJECTIVES

To introduce the students to the organization behaviour topics.

Exercises

1. Pygmalion Effect
2. Transaction analysis
3. Strokes
4. Life Positions
5. Self-efficacy/Confidence
6. Positive Psychology
7. Psychological Capital
8. Happiness/Subjective well-being
9. Emotional Labour
10. Creating Rapport

TOTAL : 30 PERIODS

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand and analyse one self and others behaviour in organizations.
CO2 To analyse and improve self-confidence level.
CO3 To analyse and create good interpersonal relationship.
CO4 To create self-awareness.
CO5 To improve quality of life

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	-	2	-	-	-	-	3	3	3	-
CO2	3	-	3	-	-	-	-	3	3	3	-
CO3	3	-	3	-	-	-	-	3	3	2	-
CO4	2	-	2	-	-	-	-	3	3	2	-
CO5	3	-	3	-	-	-	-	3	3	3	-

MB1208 DATA ANALYSIS AND BUSINESS MODELING

L	P	T	C
0	0	4	2

OBJECTIVES

- To understand the importance of data analysis for business modelling.

Exercises

1. Descriptive Statistics
2. Parametric Tests
3. Non-parametric Tests
4. Correlation & Regression
5. Forecasting
   Extended experiment–1
6. Portfolio Selection
7. Risk Analysis & Sensitivity Analysis
8. Revenue Management
   Extended experiment–2
9. Transportation & Assignment
10. Networking Models
11. Queuing Theory
12. Inventory Models
    Extended experiments–3

TOTAL : 60 PERIODS

TEXT BOOKS

1. David R. Anderson, et.al, "An Introduction to Management Sciences: Quantitative approaches to Decision Making", (13th edition) South-Western College Pub, 2011.

2. William J. Stevenson, Ceyhun Ozgur,"Introduction to Management Science with Spread sheet", Tata McGraw Hill, 2009.
3. Hansa Lysander Manohar," Data Analysis and Business Modelling using Microsoft Excel" PHI, 2017.

REFERENCE BOOKS

1. David M. Levine etal, "Statistics for Managers using MS - Excel" (6th Edition) Pearson, 2010.
2. Minnick, C. Web Kit for Dummies. John Wiley & Sons,(2012).

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To analyze data and test hypothesis using parametric test
CO2 To analyze data and test hypothesis using nonparametric test
CO3 To forecast business using analytical tools
CO4 To apply risk and sensitivity analysis and portfolio selection based on business data
CO5 To apply analytical tools related to networking, inventory models and queuing theory

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	1	-	-	-	3	3	3	-
CO2	3	3	3	1	-	-	-	3	3	3	-
CO3	3	3	3	1	-	-	-	3	3	3	-
CO4	3	3	3	1	-	-	-	3	3	3	-
CO5	3	3	3	1	-	-	-	3	3	3	-

MB1301 STRATEGIC MANAGEMENT

L	P	T	C
3	0	0	3

OBJECTIVES

- To learn the fundamentals of strategy and process
- To understand the competitive advantage for business organisation
- To understand various strategy adopted by organisations
- To understand the strategic implementation & Evaluation process
- To understand the issues in implementation of strategy

UNIT I STRATEGY AND PROCESS **9**

Conceptual framework for strategic management, the Concept of Strategy and the Strategy Formation Process – Stake holders in business – Vision, Mission and Purpose – Business definition, Objectives and Goals -Corporate Governance and Social responsibility-case study. **CO1**

UNIT II COMPETITIVE ADVANTAGE **9**

External Environment - Porter's Five Forces Model-Strategic Groups Competitive Changes during Industry Evolution – Globalisation and Industry Structure – National Context and Competitive advantage - Resources – Capabilities and competencies – core competencies – Low cost and differentiation Generic Building Blocks of Competitive Advantage – **CO2**

Distinctive Competencies - Resources and Capabilities durability of competitive Advantage- Avoiding failures and sustaining competitive advantage – Case study.

UNIT III STRATEGIES **9**

The generic strategic alternatives – Stability, Expansion, Retrenchment and Combination strategies – Business level strategy – Strategy in the Global Environment – Corporate Strategy – Vertical Integration - Diversification and Strategic Alliances - Building and Restructuring the corporation - Strategic analysis and choice – Managing Growth - Environmental Threat and Opportunity Profile(ETOP) - Organizational Capability Profile - Strategic Advantage Profile - Corporate Portfolio Analysis - SWOT Analysis - GAP Analysis - Mc Kinsey's 7s Framework - GE 9 Cell Model –Distinctive competitiveness - Selection of matrix - Balance Score Card- case study. **CO3**

UNIT IV STRATEGY IMPLEMENTATION & EVALUATION **9**

The Implementation process, Resource allocation, Designing organisational structure – Designing Strategic Control systems – Matching structure and control to strategy – Implementating strategic change – politics – power and conflict – Techniques of strategic evaluation & control - case study **CO4**

UNIT V OTHER STRATEGIC ISSUES **9**

Managing Technology and Innovation – Strategic issues for Non Profit organisations. New Business Models and strategies for Internet Economy – case study Challenges in Strategic Management: Introduction, Strategic Management as an Organisational Force, Dealing with Strategic Management in Various Situations, Strategic Management Implications and Challenges Recent Trends in Strategic Management: Introduction, Strategic Thinking, Organisational Culture and its Significance, Organisational Development and Change, Change Management, Strategic management in a new globalised economy **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Hill. Strategic Management: An Integrated approach,2009 Edition Wiley(2012).
2. John A. Parnell. Strategic Management, Theory and practice Biztantra (2012).
3. Azhar Kazmi, Strategic Management and Business Policy,3rdEdition,TataMcGrawHill,2008
4. Adriau H Aberberg and Alison Rieple, Strategic Management Theory & Application, Oxford University Press, 2008.

REFERENCE BOOKS

1. Gupta, Gollakota and Srinivasan, Business Policy and Strategic Management – Concepts and Application, Prentice Hall of India,2005.
2. Dr .Dharma Bir Singh, Strategic Management & Business Policy, Ko Gent Learning Solutions Inc., Wiley, 2012.
3. John Pearce, Richard Robinson and Amitha Mittal, Strategic Management, Mc Graw Hill, 12th Edition, 2012

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand and analyse the concept of strategic management process and formulations to gain knowledge about corporate governance and social responsibility.

CO2 To evaluate the external environment using tools like differentiation with distinctive advantage to avoid failures and sustaining competitive advantage.

CO3 To analyse internal business environment and create organizational level strategies

CO4 To apply strategies in practice. To evaluate and control strategies.

CO5 To create innovative technology and to analyse the issues of profit and nonprofit

organisations.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	2	3	1	1	3	3	3	-
CO2	3	3	3	2	3	1	1	3	3	3	-
CO3	3	3	3	2	3	1	1	3	3	3	-
CO4	3	3	3	2	3	1	1	3	3	3	-
CO5	3	3	3	2	3	1	1	3	3	3	-

MB1302 INTERNATIONAL BUSINESS

L	P	T	C
3	0	0	3

OBJECTIVES

- To learn the fundamentals of International Business
- To understand the theories of International Trade and Investment
- To understand various strategy to enter global markets
- To understand the strategy in Marketing, Marketing, Financials of Global Business
- To understand the issues in Human Resource Management in International Business

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

Definition and drivers of International Business- Changing Environment of International Business – Country attractiveness – Trends in Globalization – Effect and Benefit of Globalization – International Institution: UNCTAD Basic Principles and Major Achievements, Role of IMF, Features of IBRD, Role and Advantage of WTO. **CO1**

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

Theories of International Trade: Mercantilism, Absolute Advantage Theory, Comparative Cost Theory, Hecksher – Ohlin Theory – Theories of Foreign Direct Investment: Product Life Cycle, Eclectic, Market Power, Internationalisation – Instruments of Trade Policy : Voluntary Export Restraints, Administrative Policy, Anti-dumping Policy, Balance of Payment. **CO2**

UNIT III GLOBAL ENTRY **9**

Strategic compulsions-– Strategic options – Global portfolio management- Global entry strategy, different forms of international business, advantages – Organizational issues of international business – Organizational structures – Controlling of international business, approaches to control –Performance of global business, performance evaluation system. **CO3**

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

Global production: Location, scale of operations – cost of production – Standardization Vs Differentiation – Make or Buy decisions – global supply chain issues – Quality considerations. Globalization of markets: Marketing strategy - Challenges in product development – pricing – production and channel management. Foreign Exchange Determination Systems: Basic Concepts – types of Exchange Rate Regimes-Factors Affecting Exchange Rates. **CO4**

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

Selection of expatriate managers – Managing across cultures – Training and development – Compensation – Disadvantages of international business – Conflict in international business - **CO5**

Sources and types of conflict – Conflict resolutions – Negotiation –Ethical issues in international business–Ethical decision-making.

TOTAL : 45 PERIODS

TEXT BOOKS

1. CharlesnW.I.Hill and Arun Kumar Jain, International Business,6th edition, Tata McGraw Hill, New Delhi, 2010
2. Michael R.Czinkota, IlkkaA. Ronkainen and Michael H.Moffet, International Business,7Edition, Cengage Learning,NewDelhi,2010
3. K.Aswathappa, International Business, 5th Edition,TataMcGrawHill,NewDelhi,2012.

REFERENCE BOOKS

1. John D. Daniels and Leeh Radebaugh, International Business, Pearson Education Asia, New Delhi, 12th edition.
2. Vyuptakesh Sharan, International Business,3rd Edition, Pearson Education in South Asia, New Delhi, 2011
3. Rakesh Mohan Joshi, International Business, Oxford University Press, New Delhi, 2009

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand and remember the concepts and importance of international business environment and globalization

CO2 To understand the different theories of international trade and investment and instruments of trade policy

CO3 To evaluate the effectiveness of global entry strategies

CO4 To apply the different functional strategies for effective global business

CO5 To evaluate the cultural aspects of international business

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	2	3	1	1	3	3	3	-
CO2	3	3	3	2	3	1	1	3	3	3	-
CO3	3	3	3	2	3	1	1	3	3	3	-
CO4	3	3	3	2	3	1	1	3	3	3	-
CO5	3	3	3	2	3	1	1	3	3	3	3

MB1309 CREATIVITY AND INNOVATION LABORATORY

L	P	T	C
0	0	4	2

OBJECTIVES

- To learn the fundamentals of creativity and Innovation
- To understand the mechanism of thinking and Visualization
- To understand various strategy in creativity
- To understand the problem solving in creativity
- To understand the issues in Innovation

UNIT I INTRODUCTION **12**

Need for Creative and innovative thinking for quality – Essential theory about directed creativity, Components of Creativity, Methodologies and approaches, individual and group creativity, Organizational role in creativity, types of innovation, barriers to innovation, innovation process, establishing criterion for assessment of creativity & innovation **CO1**

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

Definitions and theory of mechanisms of mind heuristics and models: attitudes, Approaches and Actions that support creative thinking-Advanced study of visual elements and principles - line, plane, shape, form, pattern, texture gradation, color symmetry. Spatial relationships and compositions in 2 and 3 dimensional space - procedure for genuine graphical computer animation –Animation aerodynamics – virtual environments in scientific Visualization– Unifying principle of data management for scientific visualization–Visualization bench marking **CO2**

UNIT III CREATIVITY **12**

Nature of Creativity: Person, Process, Product and Environment, Methods and tools for Directed Creativity – Basic Principles – Tools that prepare the mind for creative thought – stimulation – Development and Actions – Processes in creativity ICEDIP–Inspiration, Clarification, Distillation, Perspiration, Evaluation and Incubation – Creativity and Motivation The Bridge between man creativity and there wards of innovativeness – Applying Directed Creativity. **CO3**

UNIT IV CREATIVITY IN PROBLEM SOLVING **12**

Generating and acquiring new ideas, product design, service design – case studies and hands –on exercises, stimulation tools and approaches, six thinking hats, lateral thinking – Individual activity, group activity, contextual influences. Assessing Your Personal Creativity and Ability to Innovate, Enhancing Your Creative and Innovative Abilities **CO4**

UNIT V INNOVATION **12**

Innovation- radical vs evolutionary,–Introduction to TRIZ methodology of Inventive Problem Solving – the essential factors – Innovator's solution – creating and sustaining successful growth –Disruptive Innovation model – Segmentive Models – New market disruption – Managing the Strategy Development Process – The Role of Senior Executive in Leading New Growth – Passing the Baton, Entrepreneurial Tools for Creativity and Innovation **CO5**

TOTAL : 60 PERIODS

TEXT BOOKS

1. Rousing Creativity: Think New Now Floyd Hurt, ISBN1560525479, Crisp Publications Inc.1999
2. Geoffrey Petty, "how to be better at Creativity", The Industrial Society 2012
3. Clayton M. Christensen Michael E.Raynor, "The Innovator's Solution", Harvard Business School Press Boston, USA, 2007

REFERENCE BOOKS

1. Semyon D.Savransky," Engineering of Creativity–TRIZ", CRC Press New York USA," 1st edition 2000
2. CSG Krishnama Charyalu, Lalitha R Innovation management, Himalaya Publishing House 2013

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the fundamentals of creativity and Innovation
CO2 To apply the mechanism of thinking and visualization
CO3 To apply creativity

CO4 To apply creativity in problem solving
CO5 To apply entrepreneurial tools for creativity and innovation

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	1	1	2	2	-	3	3	2	-
CO2	3	2	1	1	2	2	-	3	3	2	-
CO3	3	2	1	1	2	2	-	3	3	2	-
CO4	3	2	1	1	2	2	-	3	3	2	-
CO5	3	2	1	1	2	2	-	3	3	2	-

FUNCTIONALELECTIVES

MARKETING

MB1001 RETAIL MARKETING

L	T	P	C
3	0	0	3

OBJECTIVES

- To understand the concepts of effective retailing

UNIT I INTRODUCTION **9**

An overview of Global Retailing – Challenges and opportunities – Retail trends in India – Socio economic and technological Influences on retail management- Government of India policy implications on retails. **CO1**

UNIT II RETAIL FORMATS **9**

Organized and unorganized formats – Different organized retail formats – Characteristics of each format– Emerging trends in retail formats – MNC's role in organized retail formats. **CO2**

UNIT III RETAILING DECISIONS **9**

Choice of retail locations - internal and external atmospherics – Positioning of retail shops – Building retail store Image - Retail service quality management – Retail Supply Chain Management– Retail Pricing Decisions. Merchandizing and category management – buying. **CO3**

UNIT IV RETAIL SHOP MANAGEMENT **9**

Visual Merchandise Management–Space Management–Retail Inventory Management–Retail accounting and audits - Retail store brands – Retail advertising and promotions – Retail Management Information Systems -Online retail – Emerging trends. **CO4**

UNIT V RETAIL SHOPPER BEHAVIOUR **9**

Understanding of Retail shopper behavior – Shopper Profile Analysis – Shopping Decision Process-Factorsinfluencingretailshopperbehavior–ComplaintsManagement- Retail sales force Management– Challenges in Retailing in India **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Dr.Jaspreet Kaur, Customer Relationship Management, Kogent solution.
2. Ramkrishnan and Y.R. Srinivasan, Indian Retailing Text and Cases, Oxford University Press, 2008.

REFERENCE BOOKS

1) Dunne,Retailing,CengageLearning,2ndEdition, 2008
2) Swapna Pradhan, Retail Management -Text and Cases, Tata McGraw Hill, 3rd Edition,2009
3) Patrick M. Dunne and Robert FLusch, Retailing, Thomson Learning, 4th Edition 2008.

COURSE OUTCOMES

CO1 To understand the concept of retailing in India, analysis it with global level , government rules and implication on retailing

CO2 To understand and apply the chosen of various formats

CO3 To analyse the retail atmospheric, location, service quality management, supply chain management and pricing decision in retail management.

CO4 To understand about the interior maintenance of retail like inventory management, analyse the various visual display, advertisement and promotion necessary for retailing, role of it in retail management

CO5 To analyse the shopper behavior analysis, decision making process, complaints management and evaluate the challenges in retail

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	2	2	-	-	-	3	3	2	-
CO2	3	2	2	2	-	-	-	3	3	2	-
CO3	3	2	2	2	1	-	-	3	3	2	-
CO4	3	2	2	2	1	-	-	3	3	2	-
CO5	3	2	2	2	-	-	-	3	3	2	-

MB1002 CONSUMER BEHAVIOR

L	T	P	C
3	0	0	3

OBJECTIVES

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

UNIT I INTRODUCTION **9**

Understanding Consumer behavior, Consumption, Consumer orientation, Interpretive and Quantitative approaches - Effects of Technology, Demographics and Economy on Consumer behavior. **CO1**

UNIT II INTERNAL INFLUENCES **9**

Influencesonconsumerbehavior–motivation–perception–AttitudesandBeliefs – learning and Experience-Personality & Self Image. **CO2**

UNIT III EXTERNAL INFLUENCES **9**

Socio-Cultural, Cross Culture – Family group–Reference group–Communication – Influences on Consumer behavior **CO3**

UNIT IV CONSUMER BEHAVIOR MODELS **9**

Traditional and Contemporary Consumer behavior model for Individual and industrial buying **CO4**

behavior and decision making.

UNIT V PURCHASE DECISION PROCESS **9**

Consumer decision making process – Steps, Levels and decision rules - Evolving Indian consumers– Opinion Leadership-Diffusion and Adoption **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Ramanuj Majumdar, Consumer Behaviour –Insights from Indian Market, PHI, 2010
2. Leon G.Schiffman and Leslie Lasar Kanuk, Consumer Behaviour, Pearson Education, India, ninth edition,2010

REFERENCE BOOKS

1. BarryJ.B., Eric G.H.,Ashutosh M.,Consumer Behaviour-A South Asian Perspective, Cengage Learning, 2016.
2. P.C.Jain and Monika Bhatt., Consumer Behavior in Indian Context, S.Chand & Company, 2013.
3. Srabanti Mukherjee, Consumer behavior, Cengage Learning, 2012.
4. Assael, Consumer Behavior - A Strategic Approach, Biztranza, 2008

COURSE OUTCOMES

CO1 To Understand Consumer orientation and consumption
CO2 To apply the internal factors influences in consumer behaviour
CO3 To analyse the effects of external influences in consumer behaviour
CO4 To evaluate the consumer behaviour models in consumer behaviour
CO5 To analyse and evalueate the purchae decision process in consumer behaviour

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	1	-	-	-	3	3	2	-
CO2	3	2	3	1	-	-	-	3	3	2	-
CO3	3	2	3	1	-	-	-	3	3	2	-
CO4	3	2	3	1	-	-	-	3	3	2	-
CO5	3	2	3	1	-	-	-	3	3	2	-

MB1003 INTEGRATED MARKETING COMMUNICATIONS **L T P C**
3 0 0 3

OBJECTIVES

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

UNIT I AN INTRODUCTION TO INTEGRATED MARKETING COMMUNICATION (IMC) **9**

An Introduction to Integrated Marketing Communication (IMC): Meaning and role of IMC in Marketing process, one voice communication V/s IMC- Introduction to IMC tools – Advertising, **CO1**

sales promotion, publicity, public relations, and event sponsorship; role of advertising agencies and other marketing organizations providing marketing services and perspective on consumer behaviour.

UNIT II UNDERSTANDING COMMUNICATION PROCESS **9**

Understanding communication process: Source, Message and channel factors, Communication response hierarchy AIDA model, Hierarchy of effect model, Innovation adoption model , information processing model, The standard learning Hierarchy, Attribution Hierarchy, and low involvement hierarchy Consumer involvement- The Elaboration Likelihood (ELM) model, the Foote, Cone and Belding (FCB) Model. **CO2**

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

Establishing marcom Objectives and Budgeting for Promotional Programmes –Setting communication objectives, Sales as marcom objective, DAGMAR approach for setting add objectives. Budgeting for marcom –Factors influencing budget, Theoretical approach to budgeting viz. Marginal analysis and Sales response curve, Method to determine marcom budget. **CO3**

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

Planning and development of creative marcom, Creative strategies in advertising-salespromotion-publicity-eventsponsorshipsetc.Creativestrategy in implementation and evaluation of marcom-Types of appeals and execution styles. Media planning and selection decisions-steps involved and information needed for media planning. Measuring the effectiveness of all Promotional tools and IMC. **CO4**

UNIT V DIGITAL MEDIA & ADVERTISING **9**

Digital Media, Evolution of Technology, Convergence of Digital Media, E- Commerce and Digital Media, Advertising on Digital Media, Social Media, Mobile Adverting, E-PR Advertising Laws & Ethics: Adverting & Law, Advertising & Ethics. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Dr Niraj Kumar, Integrated Marketing Communication ,Himalaya Publishing House2015
2. Jaishri Jefhwaney, Advertising Management , Oxford University Press,2nd Edition,2013

REFERENCE BOOKS

1. Advertising & Promotion-An Integrated Marketing Communications Perspective, George Belch, Michael Belch & Keyoor Purani, TATA Mc GrawHill 8th edition
2. Terence A. Shimpand J.Craig Andrews, Advertising Promotion and other aspects of Integrated Marketing Communications, CENGAGE Learning, 9thedition, 2016

COURSE OUTCOMES

CO1 To understand the basics of traditional communication forms
CO2 To design and develop an effective Integrated Marketing Communication
CO3 To apply and analyse the marketing communication programme.
CO4 To develop integrated marketing communications tools
CO5 To develop and evaluate digital media & advertising

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	1	1	-	-	3	3	2	-

CO2	3	2	3	1	1	-	-	3	3	2	-
CO3	3	2	3	1	1	-	-	3	3	2	-
CO4	3	2	3	1	1	-	-	3	3	2	-
CO5	3	2	3	1	1	-	-	3	3	2	-

MB1004 **SERVICES MARKETING** **L T P C**
3 0 0 3

OBJECTIVES

- To appreciate the challenges involved in managing the services and analyze the strategies to deal with these challenges.

UNIT I **INTRODUCTION** **9**

Introduction–Definition–Service Economy– Evolution and growth of service sector- Nature and Scope of Services –Difference between services and tangible products –Unique characteristics of services–Challenges and issues in Services Marketing. **CO1**

UNIT II **SERVICE MARKETING OPPORTUNITIES** **9**

Assessing service market potential – Classification of services – Expanded marketing mix – Service marketing – Environment and trends – Service market segmentation, targeting and positioning. **CO2**

UNIT III **SERVICE DESIGN AND DEVELOPMENT** **9**

Service Life Cycle – New service development – Service Blue Printing – GAP model ofservicequality–Measuringservicequality–SERVQUAL–ServiceQualityfunctiondevelopment. **CO3**

UNIT IV **SERVICE DELIVERY AND PROMOTION** **9**

Positioning of services – Designing service delivery System, Service Channel – Pricing services, methods-Service marketing triangle, Managing demand, Managing supply, Managing Demand and Supply of Service–Integrated Service marketing communication. **CO4**

UNIT V **SERVICE STRATEGIES** **9**

Service Marketing Strategies for Health – Hospitality – Tourism – Financial – Logistics– Educational – Marketing of Online Services– Entertainment & public utility Information technique services. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. VinnieJauhari & Kirti Dutta(2017),Services Marketing, Text and cases, 2nd edition
2. Valarie Zeithaml et al, Services Marketing, 5th International Edition, Tata McGraw Hill,2007
3. Gronroos, Service Management and Marketing –Wiley India, 3rd Edition, 2009

REFERENCE BOOKS

1. Kenneth EClow, etal, Services Marketing Operation Management and Strategy, 2nd Edition, New Delhi, 2004.
2. Chiristropher Lovelock and Jochen Wirtz, Services Marketing, Pearson Education, New Delhi, 7th edition, 2011.
3. Hoffman, Marketing of Services, Cengage, 4th Edition, 2010.
4. Kenneth E Clow, et al, Services Marketing Operation Management and Strategy, Biztantra, 2nd Edition, New Delhi, 2004.

COURSE OUTCOMES

CO1 To understand and analyse the basic concepts of service marketing and to gain knowledge about the evolution of service sector

CO2 To evaluate the service market potential and also analyze various service marketing opportunities

with help of segmenting, targeting and positioning

CO3 To analyse service life cycle to design and develop new service, also evaluate quality of service using SERVQUAL

CO4 To understand and analyze the delivery system designing and various service channels and create various communication channels

CO5 To create innovative strategies and to analyse these strategies for various sectors of service

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	1	1	1	-	3	3	2	-
CO2	3	2	3	1	1	1	-	3	3	2	-
CO3	3	2	3	1	1	1	-	3	3	2	-
CO4	3	2	3	1	1	1	-	3	3	2	-
CO5	3	2	3	1	1	1	-	3	3	2	-

MB1005 SALES AND DISTRIBUTION MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES

- To gain insights into the selling and distribution process.

UNIT I INTRODUCTION **9**

Sales management - Nature and scope. Sales management positions. Personal Selling - Scope, theories and strategies. Sales forecasting and budgeting decisions - Online selling – scope, potential, Merits and Demerits. **CO1**

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

Selling process and relationship selling. Designing Sales Territories and quotas. Sales organization structures. **CO2**

UNIT III MANAGING THE SALES FORCE **9**

Sales force -recruitment, selection, training, motivation, compensation and control. **CO3**

UNIT IV MANAGING DISTRIBUTION CHANNELS **9**

Distribution Management - Introduction need and scope. Channels - Strategies and levels, retailing and wholesaling. Designing channel systems and channel management. **CO4**

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

Logistics - Scope, definition and components. Managing FG Inventory & warehousing. Transportation, Scope, Modes and role in Supply Chain effectiveness .Use of Information Technology in Online Selling and Goods tracking. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Krishna K. Havaldar, Vasant M. Cavale, Sales and Distribution Management - Text and Cases, Third Edition, McGraw Hill Education, 2017
2. Panda Tapan, Sales and Distribution Management, 2nd edition, 2012, Publisher: OUP India

REFERENCE BOOKS

1. Pingali Venugopal, Sales and Distribution Management – An Indian Perspective, Response Books from Sage Publications, 2008

2. Richard R Still and Edward W Cundiff, Sales and Distribution Management 6th Edition 2017 Pearson India

COURSE OUTCOME

CO1 To understand basics of sales management
CO2 To design and develop Sales Territories
CO3 To develop and manage sales force
CO4 To develop and manage distribution channels
CO5 To understand inventory and supply chain management

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	1	1	1	-	3	3	2	-
CO2	3	2	3	1	1	1	-	3	3	2	-
CO3	3	2	3	1	1	1	-	3	3	2	-
CO4	3	2	3	1	1	1	-	3	3	2	-
CO5	3	2	3	1	1	1	-	3	3	2	-

MB1006 BRAND MANAGEMENT **L T P C**
3 0 0 3

OBJECTIVES

- To understand the methods of managing brands and strategies for brand management.

UNIT I INTRODUCTION **9**

Basic understanding of Brands – Definitions - Branding Concepts – Functions of Brand – Significance of Brands – Different Types of Brands–Co branding – Store brands. **CO1**

UNIT II BRAND STRATEGIES **9**

Strategic Brand Management process – Building a strong brand – Brand positioning – Establishing Brand values – Brand vision – Brand Elements – Branding for Global Markets – Competing with foreign brands **CO2**

UNIT III BRAND COMMUNICATIONS **9**

Brand image Building – Brand Loyalty programme – Brand Promotion Methods – Role of Brand ambassadors, celebrities– On line Brand Promotions. **CO3**

UNIT IV BRAND EXTENSION **9**

Brand Adoption Practices – Different type of brand extension – Factors influencing Decision for extension– Re-branding and Re-launching. **CO4**

UNIT V BRAND PERFORMANCE **9**

Measuring Brand Performance – Brand Equity Management - Global Branding strategies – Brand Audit – Brand Equity Measurement – Brand Leverage -Role of Brand Managers– Branding challenges& opportunities **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Lan Batey, Asian Branding–A Great way to fly, PHI, Singapore, 2002.
2. Paul Tmepoal, Branding in Asia, John Willy, 2000

REFERENCE BOOKS

1. Ramesh Kumar, Managing Indian Brands, Vikas Publication, India, 2002.
2. JagdeepKapoor,Brandex,Biztranza,India,2005

COURSE OUTCOMES

CO1 To understand branding concepts
CO2 To understand strategic brand management process and apply branding elements and create global branding strategies.
CO3 To create brand communication for brand promotion.
CO4 To understand the types of brand extension and remember the factors influencing brand extension decision.
CO5 To understand brand equity measurement techniques and analyze the branding challenges and opportunities in the global market.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	1	1	1	-	3	3	2	-
CO2	3	2	3	1	1	1	-	3	3	2	-
CO3	3	2	3	1	1	1	-	3	3	2	-
CO4	3	2	3	1	1	1	-	3	3	2	-
CO5	3	2	3	1	1	1	-	3	3	2	-

MB1007 CUSTOMER RELATIONSHIP MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES

- To understand the need and importance of maintaining a good customer relationship

UNIT I INTRODUCTION **9**

Definitions - Concepts and Context of relationship Management – Evolution - Transactional Vs Relationship Approach –CRM as a strategic marketing tool–CRM significance to the stakeholders **CO1**

UNIT II UNDERSTANDING CUSTOMERS **9**

Customer information Database – Customer Profile Analysis - Customer perception, Expectations analysis – Customer behavior in relationship perspectives; individual and group customer's – Customer lifetime value – Selection of Profitable customer segments. **CO2**

UNIT III CRM STRUCTURES **9**

Elements of CRM – CRM Process – Strategies for Customer acquisition – Retention and Prevention of defection– Models of CRM–CRM road map for business applications **CO3**

UNIT IV CRM PLANNING AND IMPLEMENTATION **9**

Strategic CRM planning process – Implementation issues – CRM Tools- Analytical CRM – Operational CRM– Call centers management – Role of CRM Managers **CO4**

UNIT V TRENDS IN CRM **9**

e-CRM Solutions – Data Warehousing – Data mining for CRM – an introduction to CRM software packages **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Zikmund. Customer Relationship Management,Wiley2012
2. Francis Buttle, Customer Relationship Management:Concepts&Tools,Elsevier,2004
3. Kumar, Customer Relationship Management – A Database Approach, Wiley India,2007

REFERENCE BOOKS

1. Jim Catheart, The Eight Competencies of Relationship selling,MacmillanIndia,2005
2. H. Peeru Mohamed and A. Sahadevan, Customer Relation Management, Vikas Publishing 2005

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the concepts of relationship management

CO2 To apply the various strategic for customer relationship, customer acquisition and customer retention techniques in CRM.

CO3 To analysis the strategies for customer acquisition, retention and prevention of defection and models of CRM, CRM road map for business applications.

CO4 To evaluate the various functional area coordinate with relationship management tools and Strategies.

CO5 To remember and gain the new technological development knowledge in CRM

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	1	-	-	-	3	3	2	-
CO2	3	2	3	1	-	-	-	3	3	2	-
CO3	3	2	3	1	-	-	-	3	3	2	-
CO4	3	2	3	1	-	-	-	3	3	2	-
CO5	3	2	3	1	-	-	-	3	3	2	-

MB1041 MARKETING ANALYTICS

L	T	P	C
3	0	0	3

OBJECTIVES

- This course will provide you with an introduction to marketing analytics. We will study various tools for generating marketing insights from empirical data in such areas as segmentation, targeting and positioning, satisfaction management, customer life time analysis, customer choice, and product and price decisions using conjoint analysis

UNIT I INTRODUCTION TO MARKETING ANALYTICS **9**

Evolution and Scope of Analytics. Data for Marketing Analytics. Decision Models– Descriptive, Predictive and Prescriptive Models. Problem Solving and Decision making process. **CO1**

UNIT II DATA MANAGEMENT **9**

Exploring Data; Frequencies; Descriptive Statistics Cross tabulations; Independent Samples t-Test; One-Way ANOVA, Simple Regression and Correlation, Multiple Regression to Forecast sales, Modelling Trend and Seasonality, Ratio to Moving Average Method **CO2**

UNIT III CUSTOMER SEGMENTATION AND VALUATION **9**

Analytics for Segmentation– Introduction to Cluster analysis multivariate method. Estimation, Model performance and validation of assumptions for Cluster analysis. Customer Value Analysis, Customer Life time Value- Conjoint Analysis **CO3**

UNIT IV METRICS AND MEASUREMENT ANALYTICS **9**

Product and Price analytics- Conjoint Analysis -Pricing -Estimating Demand Curves and optimize Price Retailing Analytics- Allocating Retail Space and Sales Resources- Market Basket Analysis. Advertising and Promotion Analytics-Promotion Analytics-Measuring the effectiveness of Advertising **CO4**

UNIT V WEB ANALYTICS **9**

Search Engine Optimisation- Tracking the success of SEO. Web metrics - Google Ad words, Advertising & Analytics. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Evans, J.R. (2012). Business analytics methods, models and decisions. New Jersey: Pearson, Upper Saddle River.
2. Sorger, Stephan. ― Marketing Analytics: Strategic Models and Metrics. Admiral Press/Create Space, 2013

REFERENCE BOOKS

1. Cases and datasets for hands on learning. Pearson Education.
2. Grigsby, M. (2015). Marketing Analytics: A Practical Guide to Real Marketing Science. Kogan Page Publishers.
3. Sathi, A. (2014). Engaging customers using big data: how Marketing analytics are transforming Business. Palgrave Macmillan.
4. Rao, P. H. (2011). Predictive modelling for strategic marketing. New Delhi. Prentice Hall India

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand and apply analytics models for problem solving and decision making

CO2 To analyse the data using different statistical tools

CO3 To understand segmentation and analyze the different analytical models for segmentation

CO4 To understand and apply analytical tools for decisions on the 4Ps of marketing

CO5 To understand web analytics and apply web analytics tools for optimization

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	2	-	-	-	3	3	2	-
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CO3	3	2	3	2	-	-	-	3	3	2	-
CO4	3	2	3	2	-	-	-	3	3	2	-
CO5	3	2	3	2	-	-	1	3	3	2	-

FINANCE ELECTIVES

MB1008 SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES

- To understand the techniques involved in deciding upon purchase or sale of securities.

UNIT I INVESTMENT SETTING **9**

Financial and economic meaning of Investment– Characteristics and objectives of Investment – Investment process -Types of Investment – Investment alternatives – Choice and Evaluation– Risk and return concepts –Valuation of bonds and stock. **CO1**

UNIT II FUNDAMENTAL ANALYSIS **9**

EconomicAnalysis–EconomicforecastingandstockInvestmentDecisions–Forecastingtechniques - Industry Analysis: Industry classification, Industry life cycle – Company Analysis Measuring Earnings – Forecasting Earnings – Applied Valuation Techniques – Graham and Dodds investor ratios. **CO2**

UNIT III TECHNICAL ANALYSIS **9**

Fundamental Analysis Vs Technical Analysis -- Dow theory – Charting methods - Chart Patterns Trend – Trend reversals – Market Indicators-Moving Average – Exponential moving Average Oscillators-RSI-ROC -MACD. Efficient Market theory - Forms of market efficiency -weak, semi-strong, strong form – Empirical tests of market efficiency-its application **CO3**

UNIT IV PORTFOLIO CONSTRUCTION AND SELECTION **9**

Portfolio analysis - Reduction of portfolio risk through diversification – Portfolio risk - Portfolio Selection- Feasible set of portfolios - Efficient set - Markowitz model - Single index model –Construction of optimum portfolio-Multi-index model. **CO4**

UNIT V CAPITAL ASSET PRICING MODEL **9**

Capital Asset Pricing model – Lending and borrowing - CML - SML - Pricing with CAPM - Arbitrage pricing theory– Portfolio Evaluation - Sharpe's index Treynor's index, Jensen's index – Mutual Funds – Portfolio Revision. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. V.K.Bhalla, InvestmentManagement,Chand&CompanyLtd.,2012
2. Bodi,Kane, Markus, Mohanty ,Investments, 8th edition, Tata Mc Graw Hill, 2011.
3. Donald E.Fischer & Ronald J.Jordan, Security Analysis & Portfolio Management, PHI Learning., New Delhi, 8th edition, 2011

REFERENCE BOOKS

1. S.Kevin, Securities Analysis and Portfolio Management, PHI Learning ,2012
2. Prasannachandra, Investment analysis and Portfolio Management, Tata McGraw Hill, 2011.
3. Reilly & Brown, Investment Analysis and Portfolio Management, Cengage Learning, 9th edition, 2011.
4. S. Kevin, Securities Analysis and Portfolio Management , PHI Learning , 2012.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the basic environment of Indian financial systems especially investment options and their risk and return

CO2 To understanding the mechanism and functioning of primary and secondary markets of capital market and intermediaries

CO3 Ability to apply the securities risk and return using fundamental analysis

CO4 Skill to analyze and predict share price movements and make decisions using different methods of technical analysis

CO5 To analyze, and evaluate of manage portfolio of securities based on various techniques

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	2	2	-	-	2	3	3	-	-
CO2	3	3	2	2	-	-	2	3	3	-	-
CO3	3	3	2	2	-	-	2	3	3	-	-
CO4	3	3	2	2	-	-	2	3	3	-	-
CO5	3	3	2	2	-	-	2	3	3	-	-

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MB1009 FINANCIAL MARKETS

L	T	P	C
3	0	0	3

OBJECTIVES

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

UNIT I FINANCIAL MARKETS IN INDIA. **9**

Indian financial system and markets – structure of financial markets in India –Types- Participants in financial Market–Regulatory Environment, - RBI, CCIL, Common securities market, Money market, - Capital market- Government's philosophy and financial market–financial instruments. **CO1**

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

Primary Market - Primary market system - Types of scripts - Issue of capital: process, regulation pricing of issue, – Methods of floating new issues, Book building- Primary markets intermediaries: commercial banks, development banks, Merchant banker, issue managers, rating agencies etc – Role of primary market– Regulation of primary market **CO2**

UNIT III SECONDARY MARKET **9**

Stock exchanges in India History and development – listing-Depositaries-Stock exchange mechanism: Trading, Settlement, risk management, Basics of pricing mechanism - Player and stock exchange - Regulations of stock exchanges – Role of SEBI – BSE, OTCEI, NSE, ISE, - Role of FIIs, MFs and investment bankers –Stock market indices – calculation **CO3**

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

Bond markets in India: Government bond market and its interface with capital market – Components of bond market - G-Sec, T-Bills, Corporate Bonds, Yield conventions, Role of primary dealers, Auction Markets-Pricing of Bonds Introduction to For ex markets, basics in exchange rates theory - Forex risk exposures and basics of corporate for ex risk management **CO4**

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

Mutual funds institutions in India. Types of mutual funds, Basics in portfolio management, Metrics of performance for fund manager Introduction to Derivatives and the size of derivatives markets -Brief introduction to forwards, Options, Futures and Swaps. Role of VCs and Pes in financial markets – Venture capital and Private equity. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Saunders, Anthonu and Cornett, Marcia Millon, Financial markets and Institutions: An Introduction to the risk management approach, McGrawHill, Irwin, NewYork,3rdEdition,2017
2. V.K.Bhalla, Investment Management, S.Chand & Company Ltd., 2012

REFERENCE BOOKS

1. Pathak, BharatiV. Indian Financial System: Markets, Institutions and Services, (Singapore), New Delhi, Fourth edition, 2014.
2. Bodi, Kane, Markus, Mohanty, Investments, 8th edition, Tata McGraw Hill, 2011.
3. V.A.Avadhan, Securities Analysis and Portfolio Management, Himalaya Publishing House, 2013.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the basic concepts of the finance markets in India
CO2 To understand the mechanism of Indian Capital Market
CO3 To apply the right portfolio mix to reduce the risk in primary and secondary market
CO4 To analyse various investment avenues to find an optimum investment plan
CO5 To analyse and evaluate the various investment avenues for effective investment management

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	2	-	-	-	2	3	3	3	2
CO2	3	3	2	-	-	-	2	3	3	3	2
CO3	3	3	2	-	-	-	2	3	3	3	2
CO4	3	3	2	-	-	-	2	3	3	3	2
CO5	3	3	2	-	-	-	2	3	3	3	2

MB1010 BANKING AND FINANCIAL SERVICES

L	T	P	C
3	0	0	3

OBJECTIVES

- To understand about the asset based and fund based financial services in India.

UNIT I INTRODUCTION TO INDIAN BANKING SYSTEM AND PERFORMANCEVALUATION **9**

Overview of Indian Banking system – Structure – Functions – Key Regulations in Indian Banking sector –RBI Act, 1934/ 2006 –Banking Regulation Act, 1949– Negotiable Instruments Act 1881/2002– Provisions Relating to CRR – Provision for NPA's -Overview of Financial Statements of banks–Balance Sheet–Income Statement-CAMEL. **CO1**

UNIT II MANAGINGBANKFUNDS/PRODUCTS&RISKMANAGEMENT **9**

Capital Adequacy – Deposit and Non-deposit sources – Designing deposit schemes and pricing of deposit sources– loan management– Investment Management–Asset and Liability Management– Financial Distress –Signal to borrowers – Prediction Models – Risk Management –Interest rate – Forex– Credit market – operational and solvency risks–NPA's–Current issues on NPA's– M&A' soft banks into securities market. **CO2**

UNIT III DEVELOPMENT IN BANKING TECHNOLOGY **9**

Payment system in India– paper based– e payment – electronic banking – plastic money –e-money–forecasting of cash demand at ATM's –The Information Technology Act, 2000 in India –RBI's Financial Sector Technology vision document –security threats in e-banking & RBI' Initiative. Fin Tech - New operating models for banks-Banking as service and Open APIs - Neo banks **CO3**

UNIT IV ASSET BASED FINANCIAL SERVICES **9**

Introduction – Need for Financial Services – Financial Services Market in India– NBFC – RBI framework and act for NBFC – Leasing and Hire Purchase – Financial evaluation – underwriting –mutual funds. **CO4**

UNIT V INSURANCE AND OTHER FEE BASED FINANCIAL SERVICES **9**

Insurance Act, 1938– IRDA– Regulations– Products and services –Venture Capital Financing – Bill discounting –factoring – Merchant Banking – Role of SEBI **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Padmalatha Suresh and Justin Paul, "Management of Banking and Financial Services, Pearson, Delhi, 2017.
2. Peter S. Rose and Sylvia C. and Hudgins, "Bank Management and Financial Services", Tata McGraw Hill, New Delhi, 2012.

REFERENCE BOOKS

1. Meera Sharma, "Management of Financial Institutions – with emphasis on Bank and Risk Management", PHI Learning Pvt. Ltd., New Delhi 2010.
2. Madura, Financial Institutions & Markets, 10th edition, Cengage, 2016.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand functions of banks and analyse the bank financial statement.

CO2 To evaluate the various risk associated with inflow and outflow of funds

CO3 To apply and analyse the risk associated with the modern e-banking

CO4 To evaluate financial service offered by banks and creating revenues from those services.

CO5 To understand the various aspects of insurance and financial services offered by Banks.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	2	2	2	2	-	2	2	2	-
CO2	3	3	2	2	2	2	-	2	2	2	-
CO3	3	3	2	2	2	2	-	2	2	2	-
CO4	3	3	2	2	2	2	-	2	2	2	-
CO5	3	3	2	2	2	2	-	2	2	2	-

MB1011	FINANCIAL DERIVATIVES	L	T	P	C
		3	0	0	3

OBJECTIVES

- To understand the basic operational mechanisms in derivatives

UNIT I INTRODUCTION **9**

Derivatives – Definition – Types – Forward Contracts – Futures Contracts – Options – Swaps – Differences between Cash and Future Markets – Types of Traders – OTC and Exchange Traded Securities–Types of Settlement–Uses and Advantages of Derivatives –Risks in Derivatives. **CO1**

UNIT II FUTURES CONTRACT **9**

Specifications of Futures Contract - Margin Requirements – Marking to Market – Hedging usingFuturesTypesofFuturesContractsSecurities,StockIndexFutures,CurrenciesandCommodities – Delivery Options – Relationship between Future Prices, Forward Prices and Spot Prices. **CO2**

UNIT III OPTIONS **9**

Definition – Exchange Traded Options, OTC Options – Specifications of Options–Call and Put Options–American and European Options –Intrinsic Value and Time Value of Options– Option payoff, options on Securities, Stock Indices Currencies and Futures–Options pricing models– Differences between future and Option contracts. **CO3**

UNIT IV SWAPS **9**

Definition of SWAP – Interest Rate SWAP – Currency SWAP – Role of Financial Intermediary– Warehousing – Valuation of Interest rate SWAPs and Currency SWAPs Bonds and FRNs –Credit Risk **CO4**

UNIT V DERIVATIVES IN INDIA **9**

Evolution of Derivatives Market in India – Regulations -framework –Exchange Trading in Derivatives – Commodity Futures – Contract Terminology and Specifications for Stock Options and Index Options in NSE – Contract Terminology and specifications for stock futures and Index futures in NSE– Contract Terminology and Specifications for Interest Rate Derivatives. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. John.C.Hull, Options, Futures and other Derivative Securities", PHI Learning, 9th Edition,2012
2. S.L.Gupta, Financial Derivatives- Theory, Concepts and Practice, Prentice Hall Of India,2011.Websiteof NSE, BSE
3. David Dubofsky – „Option and Financial Futures – Valuation and Uses, McGraw Hill International Edition.

REFERENCE BOOKS

1. Keith Redhead, „Financial Derivatives – An Introduction to Futures, Forwards, Options and SWAPs",– PHI Learning, 2011.
2. Stulz, Risk Management and Derivatives, Cengage Learning, 2nd Edition, 2011.
3. Varma, Derivaties and Risk Management, 2ndt Edition, 2011.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To possess good skills in hedging risks using derivative

CO2 To understand about future contract and options

CO3 Learning in depth about options and swaps.

CO4 To knowing about the evolution of derivative markets.

CO5 To develop in depth knowledge about stock options and index futures in NSE

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	2	2	2	2	-	2	2	2	-
CO2	3	3	2	2	2	2	-	2	2	2	-
CO3	3	3	2	2	2	2	-	2	2	2	-
CO4	3	3	2	2	2	2	-	2	2	2	-
CO5	3	3	2	2	2	2	-	2	2	2	-

MB1012 FINANCIAL MODELLING

L	T	P	C
3	0	0	3

OBJECTIVES

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

UNIT I INTRODUCTION TO FINANCIAL MODELLING & BUILT INFUNCTIONS USING SPREAD SHEETS **9**

Introduction to Financial Modeling- Need for Financial Modeling- Steps for effective financial modeling-Introduction to Time value of money &Look up array functions FV,PV,PMT,RATE, NPER, V lookup, H lookup,if, count if etc - Time value of Money Models: EMI with Single& Two Interest rates–Loan amortization modeling-Debenture redemption modeling. **CO1**

UNIT II BOND & EQUITY SHARE VALUATION MODELLING **9**

Bond valuation – Yield to Maturity (YTM): Rate method Vs IRR method-Flexi Bond and Strip Bond YTM Modeling-Bond redemption modeling -Equity share valuation: Multiple growth rate valuation modeling with and without growth rates. **CO2**

UNIT III FINANCIAL MODELLING **9**

AltMan Z score Bankruptcy Modeling-Indifference point model in Financial Break-even modeling -Corporate valuation modeling (Two stage growth)- Business Modeling for capital budgeting evaluation: Payback period, NPV, IRR and MIRR. **CO3**

UNIT IV PORTFOLIO MODELLING **9**

Ris , Beta and Annualized Return –Security Market Line Modeling –Portfolio risk calculation (Equal Proportions)- Portfolio risk optimization(varying proportions)- Portfolio construction modeling. **CO4**

UNIT V DERIVATIVE MODELLING **9**

Option pay off modeling: Long and Short Call & Put options -Option pricing modeling (B-SModel)- Optimal Hedge Contract modeling. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Wayne L Winston," Microsoft Excel 2016-Data Analysis and Business Modelling", PHI publications, (Microsoft Press), NewDelhi,2017
2. Chandan Sen Gupta, "Financial analysis and Modelling –Using Excel and VBA" , WileyPublishingHouse,2014

REFERENCE BOOKS

1. Ruzhbeh J Bodanwala , "Financial management using excel spread sheet", Taxman Allied services Pvt Ltd, New Delhi,3rd Edition2015.
2. Craig W Holden, "Excel Modelling in Investments" Pearson Prentice Hall, Pearson Inc,New Jersey,5th Edition 2015

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To develop fast efficient and accurate excel skills.
CO2 To design and construct useful and robust financial modeling applications
CO3 To recognize efficient financial budgeting and forecasting techniques.
CO4 To familiarize the students with the valuation modeling of securities.
CO5 The course establishes the platform for students to develop various portfolio models

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	2	2	2	2	-	2	2	2	-
CO2	3	3	2	2	2	2	-	2	2	2	-
CO3	3	3	2	2	2	2	-	2	2	2	-
CO4	3	3	2	2	2	2	-	2	2	2	-
CO5	3	3	2	2	2	2	-	2	2	2	-

MB1013 INTERNATIONAL TRADE FINANCE

L	T	P	C
3	0	0	3

OBJECTIVES

- To understand export import finance and forex management.

UNIT I INTERNATIONAL TRADE **9**

International Trade – Meaning and Benefits – Basis of International Trade – Foreign Trade and Economic Growth – Balance of Trade – Balance of Payment – Current Trends in India – Barriers to International Trade–WTO–Indian EXIM Policy. **CO1**

UNIT II EXPORT AND IMPORT FINACE **9**

Special need for Finance in International Trade – INCO Terms (FOB, CIF, etc.,) – Payment Terms–Letters of Credit – Pre-Shipment and Post Shipment Finance – Forfeiting – Deferred Payment Terms –EXIM Bank–ECG Candits schemes–Import Licensing– Financing methods for import of Capital goods CO2

UNIT III FOREX MANAGEMENT **9**

Foreign Exchange Markets – Spot Prices and Forward Prices – Factors influencing Exchange rates. The effects of Exchange rates in Foreign Trade Tools for hedging against Exchange rate variations Forward, Futures and Currency options FEMA Determination of Foreign Exchange rate and Forecasting. **CO3**

UNIT IV DOCUMENTATION ININTERNATIONALTRADE **9**

Export Trade Documents: Financial Documents – Bill of Exchange- Type- Commercial Documents - Proforma, Commercial, Consular, Customs, Legalized Invoice, Certificate of Origin, Certificate Value, Packing List, Weight Certificate, Certificate of Analysis and Quality, Certificate of Inspection, Health certificate. Transport Documents - Bill of Lading, Airway Bill, Postal Receipt, Multimodal Transport Document. Risk Covering Document: Insurance Policy, Insurance Cover Note. Official Document: Export Declaration Forms, GR Form, PP From, COD Form, Softer Forms, Export Certification, GSPS – UPCDC Norms. **CO4**

UNIT V EXPORT PROMOTION SCHEMES **9**

Government Organizations Promoting Exports – Export Incentives: Duty Exemption – IT Concession –Marketing Assistance – EPCG, DEPB– Advance License – Other efforts I Export Promotion– EPZ –EQU– SEZ and Export House. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Apte P.G., International Financial Management, Tata McGraw Hill,2011
2. JeffMadura, International Corporate Finance, Cengage Learning,9thEdition,2011

REFERENCE BOOKS

1. Website of Indian Government on EXIM policy.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the concepts of international trade and role of WTO
CO2 To apply analyze and evaluate the methods and instruments of payment, pricing, incoterms, export import strategies.
CO3 To analyse the nature and functioning of foreign exchange markets,.
CO4 To evaluate international trade documentation
CO5 To apply the export promotion schemes

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	2	2	2	2	-	3	3	3	2
CO2	3	3	2	2	2	2	-	3	3	3	2
CO3	3	3	2	2	2	2	-	3	3	3	2
CO4	3	3	2	2	2	2	-	3	3	3	2
CO5	3	3	2	2	2	2	-	3	3	3	2

MB1014 BEHAVIORAL FINANCE **L T P C**
3 0 0 3

OBJECTIVES

- To identify and understand systematic behavioural factors that influences the investment behaviour.

UNIT I INTRODUCTION: WHY BEHAVIORAL FINANCE **9**

The role of security prices in the economy – EMH – Failing EMH – EMH in supply and demand framework – Equilibrium expected return models –Investment decision under uncertainty – Introduction to neo classical economics and expected utility theory – Return predictability in stock **CO1**

market - Limitations to arbitrage.

UNIT II DECISION AND BEHAVIORAL THEORIES **9**

Nash Equilibrium: Keynesian Beauty Context and The Prisoner's Dilemma- The Monthly Hall Paradox- The St. Petersburg Paradox- The Allais Paradox- The Ellsberg Paradox – Prospects theory – CAPM - behavioral portfolio theory – SP/A theory – brief history on rational thought – Pascal– Fermat to Friedman - savage. **CO2**

UNIT III DECISION MAKING BIASES **9**

Information is screening bias - Heuristics and behavioral biases of investors – Bayesian decision making – cognitive biases – forecasting biases – emotion and neuroscience – group behavior – investing styles and behavioral finance. **CO3**

UNIT IV ARBITRAGEURS. **9**

Definition of arbitrageur - Long-short trades - Risk vs. Horizon - Transaction costs and short-selling costs-Fundamental risk -Noise-trader risk-Professional arbitrage –Destabilizing informed trading. **CO4**

UNIT V MANAGERIAL DECISIONS **9**

Supply of securities and firm investment characteristics (market timing, catering) by rational firms – Associate destitutions - Relative horizons and incentives - Biased managers. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Shleifer,Andrei(2000).InefficientMarkets:AnIntroductiontoBehavioralFinance.Oxford,UK: Oxford University Press

REFERENCE BOOKS

1. Daniel Kahneman, Paul Slovic, and Amos Tversky (eds.). (1982) Judgment under Uncertainty: Heuristics and biases, Oxford; New York: Oxford University Press.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understanding the need of behavioral finance
CO2 To knowing about various decision and behavioral theories.
CO3 To learn about heuristic and behavioral biases of investors.
CO4 To analyze arbitragers and managerial decision.
CO5 To make and evaluate managerial decisions.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	2	2	2	1	1	3	3	3	2
CO2	3	3	2	2	2	1	1	3	3	3	2
CO3	3	3	2	2	2	1	1	3	3	3	2
CO4	3	3	2	2	2	1	1	3	3	3	2
CO5	3	3	2	2	2	1	1	3	3	3	2

HUMAN RESOURCE MANAGEMENT ELECTIVES

MB1015 STRATEGIC HUMAN RESOURCE MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES

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

UNIT I CONTEXT OF SHRM **9**

SHRM - SHRM models - strategic HRM vs Traditional HRM - Barriers to Strategic HR - Adopting an Investment Perspective –Understanding and Measuring Human capital-Human side of corporate strategies - strategic work redesign - Strategic Capability – Bench Marking. **CO1**

UNIT II HUMAN RESOURCE DEVELOPMENT **9**

Meaning–Strategic framework for HRM and HRD–Vision, Mission and Values– Importance – Challenges to Organisations – HRD Functions - Roles of HRD Professionals -HRD Needs Assessment - HRD practices – Measures of HRD performance – Links to HR, Strategy and Business Goals – HRD Program Implementation and Evaluation – Recent trends–HRD Audit. **CO2**

UNIT III E-HRM **9**

e-Employee profile – e- selection and recruitment - Virtual learning and Orientation – e –training and development – e-learning strategies - e- Performance management- and Compensation design - Use of mobile applications in HR functions – Development and Implementation of HRIS – Designing HR portals – Issues in employee privacy – Employee surveys online. **CO3**

UNIT IV CAREER & COMPETENCY DEVELOPMENT **9**

Career Concepts – Roles – Career stages – Career planning and Process –Career development Models – Career Motivation and Enrichment – Managing Career plateaus-Designing Effective Career Development Systems – Competencies and Career Management Competency Mapping Models–Equity and Competency based Compensation. **CO4**

UNIT V EMPLOYEE COACHING & COUNSELING **9**

Need for Coaching – Role of HR in coaching – Coaching and Performance – Skills for Effective Coaching–Coaching Effectiveness–Need for Counseling –Role of HR in Counseling - Components of Counseling Programs – Counseling Effectiveness – Employee Health and Welfare Programs. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Strategic Human Resource Management 1St Edition 2015 by Mathur, SP , New Age international (P) Ltd.
2. Randy L. Desimone, Jon M. Werner – David M. Mathis, Human Resource Development, Cengage Learning, 7th edition, 2016.

REFERENCE BOOKS

1. Jeffrey A Mello, Strategic Human Resource Management, Cengage Learning, 3rd edition, 2011.
2. PaulBoselie.StrategicHumanResourceManagement.TataMcGrawHill.2011
3. RobertL. Mathis and John H. Jackson, Human Resource Management, Cengage Learning, 2007.
4. Pulak Das. Strategic Human Resource Management- A Resource Driven Perspective-Cengage Learning 4thIndian Reprint-2013.
5. Terresa Torres Coronas & Mario Arias Olivia. e-Human Resource Management-Managing Knowledge People- Idea GroupPublishing,2005.
6. Randall S Schuler and Susan E Jackson. Strategic Human Resource Management. Wiley Publications-2007.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To analyse the barriers to Strategic HR, and; to create Strategic Capability

CO2 To measures HRD performance and to create HRD programs

CO3 To design, develop and implement HRIS; to create e-Employee profile– e- selection and recruitment - Virtual learning and Orientation – e –training and development–e-learning strategies -e-Performance management- and Compensation design

CO4 To design, develop and evaluate Career Development Systems, Competencies and Career Management

CO5 To design, develop and evaluate coaching, counseling and Employee Health and Welfare Programs.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	2	-	-	-	3	3	3	-
CO2	3	3	3	2	-	-	-	3	3	3	-
CO3	3	3	3	2	-	-	-	3	3	3	-
CO4	3	3	3	2	-	-	2	3	3	3	2
CO5	3	3	3	2	-	-	2	3	3	3	2

MB1016 INDUSTRIAL RELATIONS AND LABOUR WELFARE

L	T	P	C
3	0	0	3

OBJECTIVES

To explore Contemporary knowledge and gain a conceptual understanding of industrial relations.

UNIT I INDUSTRIAL RELATIONS **7**

Concepts – Importance – Industrial Relations problems in the Public Sector– Growth of Trade Unions– Codes of conduct. **CO1**

UNIT II INDUSTRIAL CONFLICTS **12**

Disputes– Impact – Causes– Strikes– Prevention – Industrial Peace – Government Machinery– Conciliation – Arbitration – Adjudication. **CO2**

UNIT III LABOUR WELFARE **8**

Concept– Objectives– Scope– Need– Voluntary Welfare Measures– Statutory Welfare Measures– Labour– Welfare Funds– Education and Training Schemes. **CO3**

UNIT IV INDUSTRIAL SAFETY **9**

Causes of Accidents– Prevention–Safety Provisions– Industrial Health and Hygiene–Importance– Problems–Occupational Hazards– Diseases–Psychological problems– Counseling– Statutory Provisions. **CO4**

UNIT V WELFARE OF SPECIAL CATEGORIESOF LABOUR **9**

Child Labour–Female Labour – Contract Labour– Construction labour–Agricultural Labour - Differently abled Labour –BPO & KPO Labour – Social Assistance –Social Security Implications. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Labour and Industrial Law, H K Saharay ISBN **:** 9788131252673, edition **:** 7th**:** 2017
2. MamoriaC.B.,Sathish Mamoria, Gankar, Dynamics of Industrial Relations, Himalaya Publishing House, New Delhi, 2012.

REFERENCE BOOKS

1. Arun Monappa, Ranjeet Nambudiri, Patturaja Selvaraj. Industrial relations & Labour Laws. Tata McGraw Hill. 2012.
2. Ratna Sen, Industrial Relations in India, Shifting Paradigms, Macmillan India Ltd., NewDelhi, 2007.
3. C.S.Venkata Ratnam, Globalisation and Labour Management Relations, Response Books, 2007.
4. Srivastava, Industrial Relations and Labour laws, Vikas, 2007.
5. P.N.Singh, Neeraj Kumar. Employee relations Management. Pearson.2011.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the concept of Industry relations , Analysis of industrial relation problem , evaluate Government rules and implication on code of conduct

CO2 To Remember the various disputes and evaluate the causes and impact of distputes and analyse the various methods to overcome this

CO3 To Analyse the various welfare measures, and evaluate the training schemes

CO4 To understand and analyze the causes of accidents and safety provisions

CO5 To Analyse the different types of labours and understand the ways to handle them

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	1	-	-	1	3	3	3	1
CO2	3	3	3	1	-	-	1	3	3	3	1
CO3	3	3	3	1	-	-	1	3	3	3	1
CO4	3	3	3	1	-	-	1	3	3	3	1
CO5	3	3	3	1	-	-	1	3	3	3	1

MB1017 SOCIAL PSYCHOLOGY

L	T	P	C
3	0	0	3

OBJECTIVES

To study how people view themselves and others, how people interact, influence and act when they are a part of a group.

UNIT I INTRODUCTION TO SOCIAL PSYCHOLOGY **6**

Social Psychology– Origin and development– Social behavior and social thought–Applications in society and business. **CO1**

UNIT II PERCEIVING AND UNDERSTANDING OTHERS **9**

Social perception – Nonverbal communication – Attribution – Impression formation and impression management **CO2**

UNIT III COGNITIONIN THE SOCIAL WORLD **10**

Self, Self Esteem & Social Comparison, self-efficacy, narcissism, Social cognition– Schemas–Heuristics – Errors – Attitudes & Behaviour –Persuasion –Cognitive dissonance **CO3**

UNIT IV INTERPERSONAL RELATIONS **10**

Social identity – Prejudice – Discrimination – Aggression – Interpersonal attraction and Relationships **CO4**

UNIT V APPLIED SOCIAL PSYCHOLOGY **10**

Social Influence – Conformity – Compliance – Social Influence - Prosocial behaviour – Groups–Social issues, Stress, personal beliefs and health. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Social Psychology Robert A Baron, Nyla R Branscombe 13th Edition – PEARSON: 2017
2. Rohallet al. Social Psychology. PHI Learning. 2nd edition
3. Attitudes, Personality and Behaviour. Ajzer. Tata Mc Graw Hill

REFERENCE BOOKS

1. Baron, Byrne and Brascombe, Social Psychology, 13th Edition, Pearson, 2014.
2. David G. Myers, Social Psychology, Tata Mc Graw Hill, 11th Edition,.
3. Baron and Byrne, Social Psychology, 8th Edition, PHI, 2006.
4. Howitt. Social Psychology. Tata Mc Graw Hill

COURSE OUTCOMES

Upon completion of the course, students will be able to learn about

CO1 To remember and understand social behavior and social thought.

CO2 To understand social perception and impression formation and impression management

CO3 To apply schemas–to reduce errors in cognitive dissonance

CO4 To analyse social identity , prejudice and discrimination in interpersonal attraction and relationships

CO5 To evaluate social issues - stress, personal beliefs and health

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	1	1	1	1	3	3	3	1
CO2	3	3	3	1	1	1	1	3	3	3	1
CO3	3	3	3	1	1	1	1	3	3	3	1
CO4	3	3	3	1	1	1	1	3	3	3	1
CO5	3	3	3	1	1	1	1	3	3	3	1

MB1018 ORGANIZATIONAL DESIGN, CHANGE AND DEVELOPMENT **L T P C**

3 0 0 3

OBJECTIVES

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

UNIT I ORGANIZATIONAL DESIGN **9**

Organizational Design– Determinants– Components–Basic Challenges of design– Differentiation, Integration, Centralization, Decentralization, Standardization, Mutual adjustment -Mechanistic and Organic Structures- Technological and Environmental Impacts on Design-Importance of Design – Success and Failures in design. **CO1**

UNIT II ORGANIZATIONAL CHANGE **9**

Meaning, Nature, Forces for change- change agents- Change process-Types and forms of change –Models of change –Resistance to change –individual factors–organizational factors–techniques to overcome change-Change programs–job redesign. **CO2**

UNIT III ORGANIZATIONAL DEVELOPMENT **9**

Introduction- evolution- basic values and assumptions- foundations of OD- Process of OD- managing the phases of OD – Organizational diagnosis -Process- stages- Techniques- Questionnaire, interview, workshop, task-force - collecting, analyzing – feedback of diagnostic information. **CO3**

UNIT IV OD INTERVENTION **9**

Human process interventions-Individual, group and inter-group human relations- structure and technological interventions- strategy interventions–sensitivity training–survey feedback, process consultation–team building – inter-group development **CO4**

UNIT V ORGANIZATIONAL EVOLUTION AND SUSTENANCE **9**

Organizational life cycle – Models of transformation – Models of Organizational Decision making – Organizational Learning – Innovation, Intrapreneurship and Creativity-HR implications. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Wendell L. French, Cecil H. Bell, Jr, Veena Vohra - Organization Development : Behavioral Science Interventions for Organizational Improvement, Sixth Edition2017
2. S. Ramnarayan, T. Venkateswara Rao, Kuldeep Singh: Organization Development: Interventions And Strategies, Sage Publications 2015

REFERENCE BOOKS

1. French & Bell: Organisational Development, McGraw-Hill, 2005
2. Rajiv Shaw: Surviving Tomorrow: Turnaround Strategies in Organisational Design and Development, Vikas Publishing House.
3. Thomas G. Cummings, Christopher G. Worley: Organisation Development and Change, Thomson Learning.
4. Change & Knowledge Management-R.L. Nandeshwar, Bala Krishna Jayasimha, Excel Books, 1st Ed.
5. Management of Organizational Change – K Harigopal – Response BOOKS, 2nd editon,2006
6. Organizational, Design, and Change-Gareth R. Jones, 5th Edition, PearsonEducation

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the fundamental components of organizational structure and design

CO2 To analyze the various dimensions of organizational change and techniques to overcome it

CO3 To remember the concepts of organizational development and apply it techniques
CO4 To apply the OD intervention techniques
CO5 To understand the evolution and reason the sustenance of the organization

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	1	-	-	-	3	3	3	1
CO2	3	3	3	1	-	-	-	3	3	3	1
CO3	3	3	3	1	-	-	3	3	3	3	1
CO4	3	3	3	1	-	-	2	3	3	3	1
CO5	3	3	3	1	-	-	-	3	3	3	1

MB1019 MANAGERIAL BEHAVIOR AND EFFECTIVENESS

L	T	P	C
3	0	0	3

OBJECTIVES

- To examine managerial styles in terms of concern for production and concern for people.
- To assess different systems of management and relate these systems to organizational characteristics.

UNIT I DEFINING THE MANAGERIAL JOB **9**

Descriptive Dimensions of Managerial Jobs – Methods – Model – Time Dimensions in Managerial Jobs – Effective and Ineffective Job behavior – Functional and level differences in Managerial Job behavior. **CO1**

UNIT II DESIGNING THE MANAGERIAL JOB **9**

Identifying Managerial Talent – Selection and Recruitment – Managerial Skills Development – Pay and Rewards – Managerial Motivation – Effective Management Criteria – Performance Appraisal Measures – Balanced Scorecard - Feedback – Career Management – Current Practices. **CO2**

UNIT III THE CONCEPT OF MANAGERIAL EFFECTIVENESS **9**

Definition – The person, process, product approaches – Bridging the Gap – Measuring Managerial Effectiveness – Current Industrial and Government practices in the Management of Managerial Effectiveness- the Effective Manager as an Optimizer. **CO3**

UNIT IV ENVIRONMENTAL ISSUES IN MANAGERIAL EFFECTIVENESS **9**

Organizational Processes – Organizational Climate – Leader – Group Influences – Job Challenge – Competition – Managerial Styles. **CO4**

UNIT V DEVELOPING THE WINNING EDGE **9**

Organizational and Managerial Efforts – Self Development – Negotiation Skills – Development of the Competitive Spirit – Knowledge Management – Fostering Creativity and innovation . **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Managerial behavior and effectiveness ,Alejandro Serralde 2020 Kindle edition

REFERENCE BOOKS

1. Milkovich and Newman, Compensation, McGraw-Hill International, 2005.
2. Blanchard and Thacker, Effective Training Systems, Strategies and Practices

Pearson 2006.
3. Dubrin, Leadership, Research Findings, Practices & Skills, Biztantra, 2008.
4. Joe Tidd , John Bessant, Keith Pavitt , Managing Innovation ,Wiley 3rdedition,2006.
5. T.V.Rao, Appraising and Developing Managerial Performance, ExcelBooks,2002.
6. R.M.Omkar, Personality Development and Career Management, S.Chand,1sr edition, 2008.
7. Richard L.Daft, Leadership, Cengage, 1st Indian Reprint2008.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand appropriate style of managerial behavior
CO2 To design and evaluate the managerial job.
CO3 To understand the managerial effectiveness
CO4 The analyse and solve environmental issues in managerial effectiveness
CO5 The design and develop a winning edge in creativity and innovation.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	1	1	1	1	3	3	3	1
CO2	3	3	3	1	1	1	1	3	3	3	1
CO3	3	3	3	1	1	1	1	3	3	3	1
CO4	3	3	3	1	1	1	1	3	3	3	1
CO5	3	3	3	1	1	1	1	3	3	3	1

MB1020 PERSONAL EFFECTIVENESS **L T P C**
3 0 0 3

OBJECTIVES

1. To enhance one's own self-awareness and understand others.
2. To explore one's own feelings and behavior.

UNIT I SELF AWARENESS AND MANAGEMENT **9**

Personal Effectiveness- Definition -Emotional Intelligence - Understanding oneself Importance self-knowledge - Stress and EI- Competence and Personal Competency - Personal Competency Models- Learning- Importance of Ongoing Learning- Learning and Unlearning- Personal Change- Impression Formation and Impression Management. **CO1**

UNIT II BUILDING TEAMS **9**

Team Building methods and strategies - Leadership and Team Building - Nature of Power Creating Effective work teams- Impact of Motivation and Delegation on Team Building - Participative Decision Making **CO2**

UNIT III COMMUNICATION **9**

Interpersonal Communication - Strategies and Issues - Culture, Diversity and Communication - Communicating Within Teams, Organizations -Communicating Outside Organizations - Assertiveness - Persuasion - Strategies. **CO3**

UNIT IV INFLUENCING OTHERS **9**

Influence- Objectives - Methods of Influence - Individual responses to Influence – Exerting Influence- Common Influencing Problems and Solutions- Aggression - Coping with **CO4**

Aggression- Negotiations- Convincing People - Developing and Using Contacts.

UNIT V TRANSCATIONAL ANALYSIS AND NLP **9**

Concept of Self- Feeling Self- Thinking Self- Believing Self- Transactions- Transactional Analysis - Structural Analysis -TA and Self Awareness- Concept of strokes- Making Sense of Life- Therapeutic Enquiry- Assessing suitability and Implementation of TA as therapy- NLP Basics - Managing Self with the power of NLP: Life Planning, Personal Vision and Mission. **CO5**

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TOTAL : 45 PERIODS

TEXT BOOKS

1. Brilliant Personal Effectiveness. Douglas Miller, 2015, Pearson Education.
2. The Seven Habits of highly effective people- Steven Covey, 2013, 25th Anniversary Edition, The Bath Press.

REFERENCE BOOKS

1. Personal Effectiveness. 3rd Edition- CMI- Alexander Murdock and Carol N. Scutt, Routledge Publishing, 2011
2. An Introduction to Transactional Analysis: Helping People to Change, Phil Lapworth and Charlotte Sills, 2011, Sage Publications.
3. NLP: The Essential Guide to Neuro-Linguistic Programming, Tom Hoobyar, Tom Dotz, Susan Sanders, Harper Collins Publishers. 2013

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To remember and understand personal competency and importance of ongoing learning

CO2 To understand the impact of motivation and delegation on team building

CO3 To apply the interpersonal Communication Strategies and analyse the issues

CO4 To analyse the Individual responses to Influence others

CO5 To evaluate the suitability and Implementation of Transaction Analysis

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	1	1	1	1	3	3	3	1
CO2	3	3	3	1	1	1	1	3	3	3	1
CO3	3	3	3	1	1	1	1	3	3	3	1
CO4	3	3	3	1	1	1	1	3	3	3	1
CO5	3	3	3	1	1	1	1	3	3	3	1

MB1021	LABOUR LEGISLATION	L	T	P	C
		3	0	0	3

OBJECTIVES

1. To have a broad understanding of the legal principles governing the employment relationship at individual and collective level.
2. To familarise the students to the practical problems inherent in the implementation of labour statutes.

UNIT I FACTORY AND TRADE UNION **9**

1.TheFactories Act,1948
2.The Trade Unions Act 1926 **CO1**

UNIT II WAGES AND DIPUTE **9**

3.ThePayment of Wages Act, 1936
4.TheMinimumWagesAct, 1948 **CO2**
5.TheIndustrialDisputesAct,1947

UNIT III COMPENSATION **9**

6.TheWorkmen'sCompensationAct,1923
7.ThePaymentofGratuityAct, 1972 **CO3**
8.ThePaymentofBonusAct, 1965

UNIT IV EMPLOYEE WELFARE **9**

9.TheEmployee'sProvidentFund&Misc. Act,1952
10.TheEmployeesState InsuranceAct,1948 **CO4**
11.TheIndustrialEmployment(Standing Orders)Act,1946

UNIT V SPECIAL ACT **9**

12.TheApprenticesAct,1961
13.TheEqualRemuneration Act,1976
14.TheMaternityBenefitAct,1961 **CO5**
15.ContractLabourRegulations andAbolitionAct,1970
16.TheChildLabourPreventionandRegulationAct,1986

TOTAL : 45 PERIODS

TEXT BOOKS

1. Labour and Industrial Law: H K Saharay Edition **:** 7th, 2017, LEXISNEXIS
2. Kapoor N. D, Elements of Mercantile Law, Sultan Chand, 2015

REFERENCE BOOKS

1. Tax Mann, Labour Laws, 2017.
2. D. R. N. Sinha, Indu Balasinha & Semma Priyadarshini Shekar, Industrial Relation, Trade unions and Labour Legislation, 2014.
3. Arun Monappa, Ranjeet Nambudiri, Patturaja Selvaraj. Industrial relation labour Laws. Tata Mc Graw Hill. 2012
4. Srivastava, Industrial Relations and Labour laws, Vikas, 2015.
5. Respective Bare Acts.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand and apply Factories Act and Trade union Act
CO2 To understand and apply Wages Act and Industrial Dispute Act
CO3 To understand and apply workmen compensation, Graduity and Bonus Act
CO4 To understand and apply employee welfare related Act

CO5 To understand and apply Apprentice, equal remuneration and women and Child labour related Act

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	1	-	-	1	3	3	3	1
CO2	3	3	3	1	-	-	1	3	3	3	1
CO3	3	3	3	1	-	-	1	3	3	3	1
CO4	3	3	3	1	-	-	1	3	3	3	1
CO5	3	3	3	1	-	-	1	3	3	3	1

MB1042 HUMAN RESOURCE ANALYTICS

L	T	P	C
3	0	0	3

OBJECTIVES

- To develop the ability of the learners to define and implement HR metrics that Sare aligned with the overall business strategy
- To know the different types of HR metrics and understand their respective impact and application
- To understand the impact and use of HR metrics and their connection with HR analytics
- To understand common workforce issues and resolving them using people analytics.

UNIT I INTRODUCTION TO HR ANALYTICS **9**

HR analytics - People Analytics: Definition- context -stages of maturity - Human Capital in the Value Chain: impact on business. HR Analytics vs HR Metrics –HR metrics and KPIs. **CO1**

UNIT II HR ANALYTICS I: RECRUITMENT **9**

Recruitment Metrics : Fill-up ratio - Time to hire - Cost per hire - Early turnover -Employee referral hires - Agency hires - Lateral hires - Fulfillment ratio- Quality of hire- Recruitment to HR cost-Recruitment analysis. **CO2**

UNIT III HR ANALYTICS II: TRAINING AND DEVELOPMENT **9**

Training & Development Metrics: Percentage of employee trained- Internally and externally trained -Training hours and cost per employee - ROI - Optimising the ROI of HR Programs - Training and Development analysis. **CO3**

UNIT IV HRANALYTICS III: EMPLOYEE ENGAGEMENT AND CAREER PROGRESSION **9**

Employee Engagement Metrics: Talent Retention- Retention index- Voluntary and involuntary turnover-Turnover by department, grades, performance, and service tenure- Internal hired index- Engagement Survey Analysis. Career Progression Metrics: Promotion index- Rotation index- Career path index- Level wise succession readiness index. **CO4**

UNIT V HR ANALYTICS IV: WORKFORCE DIVERSITY AND DEVELOPMENT **9**

Workforce Diversity and Development Metrics : Employees per manager - Workforce age profiling -Workforce service profiling – Churn over index - Work force diversity index -Gender **CO5**

mix - Differently abled index- Revenue per employee - Operating cost per employee - PBT per employee - HR cost per employee- HR budget variance -Compensation to HR cost.

TOTAL : 45 PERIODS

TEXT BOOKS

1. Dipak Kumar Bhattacharyya, HR Analytics, Understanding Theories and Applications, SAGE Publications India, 2017.
2. Sesil, J. C., Applying advanced analytics to HR management decisions: Methods for selection, developing incentives, and improving collaboration. Upper Saddle River, New Jersey: Pearson Education, 2014.
3. Pease, G., & Beresford, B, Developing Human Capital: Using Analytics to Plan and Optimize Your Learning and Development Investments. Wiley, 2014.

REFERENCE BOOKS

1. JacFitzenz, The new HR Analytics, AMACOM, 2010.
2. Edwards M. R., & Edwards K, Predictive HR Analytics: Mastering the HR Metric. London: Kogan Page.2016.
3. Human Resources kit for Dummies–3rd edition–Max Messmer,2012
4. Phillips, J.,& Phillips, P.P, Making Human Capital Analytics Work: Measuring the ROI of Human Capital Processes and Outcomes.McGraw-Hill,2014.
5. HR Score card and Metrices, HBR, 2001.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To remember the basic concepts of HR Analytics
CO2 To understand , apply and analyse how the HR Analytics apply in Recruitment
CO3 To apply, and analyse how the HR Analytics apply in Training and Development
CO4 To apply and analyse how the HR analytics help in Employee engagement and Career progression
CO5 To evaluate the HR Analytics in Work force diversity and Development

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	1	1	1	1	3	3	3	1
CO2	3	3	3	1	1	1	1	3	3	3	1
CO3	3	3	3	1	1	1	1	3	3	3	1
CO4	3	3	3	1	1	1	1	3	3	3	1
CO5	3	3	3	1	1	1	1	3	3	3	1

BUSINESS ANALYTICS ELECTIVES

MB1022 DATA MINING FOR BUSINESS INTELLIGENCE

L	T	P	C
3	0	0	3

OBJECTIVES

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

UNIT I INTRODUCTION **9**

Data mining, Text mining, Web mining, Spatial mining, Process mining, Data warehouse and data marts. **CO1**

UNIT II DATA MINING PROCESS **9**

Data mining process–KDD,CRISP- DM, SEMMA and Domain-Specific, Classification and Prediction performance measures- RSME, MAD, MAP, MAPE, Confusion matrix, Receiver Operating Characteristic curve & AUC; Validation Techniques - hold-out, k-fold cross-validation, LOOCV, random sub sampling, and bootstrapping. **CO2**

UNIT III PREDICTION TECHNIQUES **9**

Data visualization, Time series– ARIMA, Winter Holts, Vector Autoregressive analysis, Multivariate regression analysis. **CO3**

UNIT IV CLASSIFICATION AND CLUSTERING TECHNIQUES **9**

Classification - Decision trees, k nearest neighbor, Logistic regression, Discriminant analysis; Clustering; Market basket analysis; **CO4**

UNIT V MACHINE LEARNING AND AI **9**

Genetic algorithms, Neural network, Fuzzy logic, Support Vector Machine, Optimization techniques– Ant Colony, Particle Swarm, DEA **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Jaiwei Ham and Micheline Kamber, Data Mining concepts and techniques, Kauffmann Publishers 2006
2. Efraim Turban, Ramesh Sharda, Jay E.Aronson and David King, Business Intelligence, Prentice Hall, 2008.
3. W.H.Inmon, Building the Data Warehouse, fourth edition Wiley Indiapvt.Ltd.2005.
4. Ralph Kimball and Richard Merz, The data warehouse toolkit, John Wiley, 3rd edition, 2013.
5. Michel Berry and Gordon Linoff, Mastering Data mining, John Wiley and Sons Inc, 2nd Edition,2011

REFERENCE BOOKS

1. Michel Berry and Gordon Linoff, Data mining techniques for Marketing, Sales and Customer support, John Wiley, 2011
2. G.K.Gupta, Introduction to Data mining with Case Studies, Prentice hall of India,2011
3. Giudici, Applied Data mining – Statistical Methods for Business and Industry, John Wiley.2009
4. Elizabeth Vitt, Michael Luckevich Stacia Misner ,Business Intelligence,Microsoft,2011
5. 1MichalewiczZ.,SchmidtM.MichalewiczMandChiriacC, Adaptive Business Intelligence, Springer –Verlag, 2007
6. Galit Shmueli, Nitin R. Patel and Peter C. Bruce, Data Mining for Business Intelligence – Concepts, Techniques and Applications Wiley, India, 2010.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To remember and understand the various data mining techniques used in different domains.

CO2 To understand how data mining process is used in business decision making.

CO3 To apply and analyze the various prediction techniques
CO4 To evaluate the kinds of patterns that can be discovered by association rule mining, classification and clustering.
CO5 To create and evaluate a basic trainable neural network (or) a fuzzy logic system to design and manufacturing.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	2	-	-	-	3	3	3	-
CO2	3	2	3	2	-	-	-	3	3	3	-
CO3	3	2	3	2	-	-	-	3	3	3	-
CO4	3	2	3	2	-	-	-	3	3	3	-
CO5	3	2	3	2	-	-	-	3	3	3	-

MB1023 BIG DATA ANALYTICS **L T P C**
3 0 0 3

OBJECTIVES

- To understand the computational approaches to big data analytics
- To understand the various search methods and visualization techniques
- To learn to use various techniques for mining data stream
- To understand the applications using Map Reduce Concepts.

UNIT I INTRODUCTION TO BIG DATA **9**

Introduction to Big Data Platform– Challenges of Conventional Systems- Intelligent data analysis –Nature of Data- Analytic Processes and Tools - Analysis vs Reporting.. **CO1**

UNIT II MINING DATA STREAMS **9**

Introduction To Streams Concepts– Stream Data Model and Architecture- Stream Computing - Sampling Data in a Stream – Filtering Streams – Counting Distinct Elements in a Stream – Estimating Moments – Counting Oneness in a Window – Decaying Window - Real Time Analytics Platform (RTAP) Applications - Case Studies - Real Time Sentiment Analysis- Stock Market Predictions. **CO2**

UNIT III HADOOP **9**

History of Hadoop- the Hadoop Distributed File System – Components of Hadoop Analysing the Data with Hadoop- Scaling Out- Hadoop Streaming- Design of HDFS-Java interfaces to HDFS Basics- Developing a Map Reduce Application-How Map Reduce Works-Anatomy of a Map Reduce Job run-Failures-Job Scheduling-Shuffle and Sort – Task execution - Map Reduce Types and Formats-Map Reduce Features Hadoop environment. **CO3**

UNIT IV FRAMEWORKS **9**

Applications on Big Data Using Pig and Hive – Data processing operators in Pig – Hive services –Hive QL – Querying Data in Hive - fundamentals of HBase and Zoo Keeper - IBM Info Sphere Big Insights and Streams. **CO4**

UNIT V VISUALIZATION TECHNIQUES **9**

Predictive Analytics- Simple linear regression- Multiple linear regression -Interpretations of regression coefficients. Visualizations - Visual data analysis techniques- interaction techniques - Systems and applications. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Frank J Ohlhorst, "Big Data Analytics: Turning Big Data into Big Money", Wiley and SAS Business Series, 2013.
2. Colleen Mccue, "Data Mining and Predictive Analysis: Intelligence Gathering and Crime Analysis", Elsevier, Second Edition, 2015.
3. Michael Berthold, David J. Hand, "Intelligent Data Analysis", Springer, Second Edition, 2007.
4. Anand Rajaraman and Jeffrey David Ullman, "Mining of Massive Datasets", Cambridge University Press, 2014.

REFERENCE BOOKS

1. BillFranks, "Taming the Big Data Tidal Wave: Finding Opportunities in Huge Data Streams with Advanced Analytics", Wiley and SASBusinessSeries,2012.
2. Paul Zikopoulos,Chris Eaton "Understanding Big Data: Analytics for Enterprise Class Hadoop and Streaming Data", McGraw Hill, 2012.
3. Paul Zikopoulos, Dirk de Roos, Krishnan Parasuraman, Thomas Deutsch , James Giles, David Corrigan, "Harness the Power of Big data - The big data platform", McGraw Hill, McGraw-Hills born e Media, 2012.
4. Glenn J. Myatt, "Making Sense of Data I: A Practical Guide to Exploratory Data Analysis and Data Mining", John Wiley & Sons, Second Edition, 2014.
5. Pete Warden, "Big Data Glossary", O"Reilly,2011.
6. Jiawei Han, Micheline Kamber "Data Mining Concepts and Techniques", Elsevier, Third Edition, 2011.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To Understand the computational software's and techniques for handling big data and to analyze the various report formats.

CO2 To Remember the concepts, data model and architecture of streams and apply with various stream computing techniques

CO3 To Understand core technical concepts related to Business Intelligence, Big Data Analytics along with Hadoop Architecture and Analyze to data for analytics

CO4 To Understand and create the various application in Big Data

CO5 To Understand the visualization Techniques and analysis with various charts

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	3	2	-	-	1	3	2	3	-
CO2	2	2	3	2	-	-	1	3	2	3	-
CO3	2	2	3	2	-	-	1	3	2	3	-
CO4	2	2	3	2	-	-	1	3	2	3	-
CO5	2	2	3	2	-	-	1	3	2	3	-

MB1024 **CLOUD COMPUTING** **L T P C**

3 0 0 3

COURSE OBJECTIVES

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

UNIT I INTRODUCTION **9**

History of Centralized and Distributed Computing - Overview of Distributed Computing, Cluster computing, Grid computing. Technologies for Network based systems- System models for Distributed and cloud computing- Software environments for distributed systems and clouds. **CO1**

UNIT II INTRODUCTION TO CLOUD COMPUTING **9**

Introduction to Cloud Computing- Cloud issues and challenges - Properties - Characteristics - Service models, Deployment models. Cloud resources: Network and API - Virtual and Physical computational resources - Data-storage. Virtualization concepts - Types of Virtualization- Introduction to Various Hypervisors - High Availability (HA)/Disaster Recovery (DR) using Virtualization, Moving VMs . **CO2**

UNIT III CLOUD COMPUTING APPLICATIONS **9**

Cloud Programming and Software Environments – Parallel and Distributed Programming paradigms – Overview on Amazon AWS and Microsoft Azure – Overview on Google App Engine – Emerging Cloud software Environment. **CO3**

UNIT IV CLOUD SECURITY **9**

Cloud Access: authentication, authorization and accounting - Cloud Provenance and meta-data - Cloud Reliability and fault-tolerance - Cloud Security, privacy, policy and compliance- Cloud federation, interoperability and standards. **CO4**

UNIT V GOVERNANCE AND THE FUTURE OF CLOUD **9**

Organizational Readiness and Change Management in the Cloud Age, Legal Issues in Cloud Computing, Achieving Production Readiness for Cloud Services, How Cloud Will Change Operating Systems, Future of Cloud TV & Cloud-Based Smart Devices, Cloud and Mobile, Home-Based Cloud Computing. **CO5**

TOTAL : 45 PERIODS

REFERENCE BOOKS

1. Kai Hwang, Geoffrey C. Fox and Jack J. Dongarra, Distributed and cloud computing from Parallel Processing to the Internet of Things, Morgan Kaufmann, Elsevier, 2012
2. RajkumarBuyya, James Broberg and Andrzej Goscinski, Cloud Computing – Principles and Paradigms, John Wiley & Sons, 2011
3. Kris Jamsa, Cloud Computing, Jones & Bartlett Learning, 2013
4. Kumar Saurahb, Cloud Computing – Insights into new era infrastructure, Wiley India, 2nd Edition, 2012
5. Barrie Sosinsky, " Cloud Computing Bible" John Wiley & Sons, 2011
6. Tim Mather, Subra Kumaraswamy, and Shahed Latif, Cloud Security and Privacy An Enterprise Perspective on Risks and Compliance, O'Reilly 2009

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the basic concepts of cloud computing.
CO2 To analyse the cloud issues and challenges.
CO3 To apply the appropriate cloud computing solutions.
CO4 To understand the core issues of cloud computing such as security, privacy.
CO5 To develop the cloud services and to apply the idea about the future of cloud computing.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	3	2	-	-	1	3	2	3	-
CO2	2	2	3	2	-	-	1	3	2	3	-
CO3	2	2	3	2	-	-	1	3	2	3	-
CO4	2	2	3	2	-	-	1	3	2	3	-
CO5	2	2	3	2	-	-	1	3	2	3	-

MB1025 DEEP LEARNING AND ARTIFICIAL INTELLIGENCE

L	T	P	C
3	0	0	3

COURSE OBJECTIVES

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

UNIT I DEEP NETWORKS **9**

Deep Networks: Modern Practices: Deep Forward Networks: Example: Learning XOR - Gradient-Based Learning - Hidden Units - Architecture Design - Regularization for Deep Learning. **CO1**

UNIT II MODELS **9**

Optimization for Training Deep Models: How Learning Differs from Pure Optimization - Challenges in Neural Network Optimization - Basic Algorithms - Parameter Initialization Strategies - Algorithms with Adaptive Learning Rates - Approximate Second-Order Methods - Optimization Strategies and Meta Algorithms. **CO2**

UNIT III INTELLIGENT SYSTEMS **9**

Introduction to Artificial Intelligence: Intelligent Systems - Foundations of AI - Applications - Tic-Tac-Toe Game Playing - Problem Solving: State-Space Search and Control Strategies: Introduction - General Problem Solving - Exhaustive Searches - Heuristic Search Techniques. **CO3**

UNIT IV KNOWLEDGE REPRESENTATION **9**

Advanced Problem-Solving Paradigm: Planning: Introduction - Types of Planning Systems - Knowledge Representation: Introduction - Approaches to Knowledge Representation - Knowledge Representation using Semantic Network - Knowledge Representation using Frames. **CO4**

UNIT V APPLICATIONS **9**

Expert Systems and Applications: Blackboard Systems - Truth Maintenance Systems - Applications of Expert Systems - Machine-Learning Paradigms: Machine-Learning Systems - Supervised and Unsupervised Learnings. **CO5**

TOTAL : 45 PERIODS

REFERENCE BOOKS

1. Jared P.L., R for Everyone - Advanced Analytics and Graphics, Addison Wesley Data and Analytics series, 2015.
2. Sandip Rakshit, R Programming for Beginners, McGraw Hill Education, 2017

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the modern practices on deep forward networks, Architecture designs and analyse

the regularization for deep learning.

CO2 To create the models to optimize and analyse the challenges in neural network optimization, approximate Second order models and Meta algorithms.

CO3 To understand the foundations of the AI applications, Tic-tac-toe Game playing, Problem solving: state-space search, Exhaustive searches and to apply the heuristic search techniques.

CO4 To understand the advanced problem solving paradigm, types of planning systems, knowledge representation using semantic network and frames.

CO5 To apply the expert systems and applications like Blackboard systems, machine learning Paradigms and to Understand the supervised and unsupervised learnings.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	3	2	-	-	1	3	2	3	-
CO2	2	2	3	2	-	-	1	3	2	3	-
CO3	2	2	3	2	-	-	1	3	2	3	-
CO4	2	2	3	2	-	-	1	3	2	3	-
CO5	2	2	3	2	-	-	1	3	2	3	-

MB1026 R PROGRAMMING L T P C

OBJECTIVES

- To study the fundamentals of R programming to apply in quantitative analysis.

UNIT I GETTING STARTED WITH R **9**

Installing R - The R environment - R packages - Basics of R - Data Structures - Reading data into R- Graphics in R **CO1**

UNIT II FUNCTIONS AND STATEMENTS **9**

Writing R functions - Control Statements (if and else, switch, if else, compound tests) -Loops in R (for, while, controlling loops) -Applications using the functions and loops **CO2**

UNIT III DATA MANIPULATION AND ANALYSIS **9**

Group manipulation - Data Reshaping - Manipulating Strings - Basic Statistics using R (Summaries, Correlation, t-tests, ANOVA) **CO3**

UNIT IV LINEAR MODELS USING R **9**

Linear Models - Simple and Multiple regression, GLM - Logit Regression, Model diagnostics-Residuals, Cross validation, Bootstrapping. **CO4**

UNIT V NON-LINEAR MODELS, TIME SERIES AND CLUSTERING USING R **9**

Nonlinear Models - Non-Linear least square, Splines, Generalised Additive Models, Decision trees, Random forests. Time Series - Autoregressive moving average, VAR, GARCH. Clustering –K means, PAM and Hierarchical Clustering **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Jared P.L., R for Everyone - Advanced Analytics and Graphics, Addison Wesley Data and Analytics series, 2015.

REFERENCE BOOKS

1. Sandip Rakshit, R Programming for Beginners, McGraw Hill Education,2017

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To install and understand the basics in R, data structures and graphics in R.
CO2 To apply the R functions, statements and loops in analyses.
CO3 To evaluate the basic statistical analytics like summary correlation, t-tests and ANOVA.
CO4 To create the linear models using R in solving the business programs.
CO5 To enhance the knowledge on Non-linear models in applying them to solve the organizational problems.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	3	2	-	-	1	3	2	3	-
CO2	2	2	3	2	-	-	1	3	2	3	-
CO3	2	2	3	2	-	-	1	3	2	3	-
CO4	2	2	3	2	-	-	1	3	2	3	-
CO5	2	2	3	2	-	-	1	3	2	3	-

MB1027 MULTIVARIATE DATA ANALYSIS L T P C

OBJECTIVES

- To know various multivariate data analysis techniques for business research.

UNIT I INTRODUCTION **9**

Introduction – Basic concepts – Uni-variate, Bi-variate and Multi-variate techniques– Types of multivariate techniques– Classification of multivariate techniques– Guidelines for multivariate analysis and interpretation –Approaches to multivariate model building **CO1**

UNIT II PREPARING FOR MULTIVARIATE ANALYSIS **9**

Introduction– Conceptualization of research problem– Identification of technique- Examination of variables and data – Measurement of variables and collection of data –Measurement of errors – Statistical significance of errors. Missing data – Approaches for dealing with missing data– Testing the assumptions of multivariate analysis–Incorporating non-metric data with dummy variables. **CO2**

UNIT III MULTIPLE LINEAR REGRESSION ANALYSIS, FACTOR ANALYSIS **9**

Multiple Linear Regression Analysis – Introduction – Basic concepts – Multiple linear regression model – Least square estimation – Inferences from the estimated regression function– Validation of the model. Factor Analysis: Definition– OBJECTIVE– Approaches to factor analysis – methods of estimation – Factor rotation – Factor scores -Sum of variance explained– interpretation of results **CO3**

UNIT IV LATENT VARIABLE TECHNIQUES **9**

Confirmatory Factor Analysis, Structural Equation modeling, Mediation models, Moderation models, Conditional processes, longitudinal studies, latent growth model, Bayesian inference **CO4**

UNIT V ADVANCED MULTIVARIATE TECHNIQUES **9**

Multiple Discriminant Analysis, Logistic Regression, Cluster Analysis, Conjoint Analysis, multidimensional scaling. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Joseph F Hair, Rolph E Anderson, Ronald L. Tatham & William C. Black, Multivariate Data Analysis, Pearson Education, New Delhi, 2005.
2. Barbara G. Tabachnick, Linda S. Fidell, Using Multivariate Statistics, 6th Edition, Pearson, 2012.

REFERENCE BOOKS

1. Richard A Johnson and Dean W. Wichern, Applied Multivariate Statistical Analysis, Prentice Hall, New Delhi, 2005.
2. David R Anderson, Dennis J Seveency, and Thomas A Williams, Statistics for Business and Economics, Thompson, Singapore, 2002

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the basic concepts and creating multivariate models using different models.
CO2 To collect data for variables by creating survey instruments and evaluating the relationships between variables.
CO3 To apply different multivariate analysis tools and techniques.
CO4 To select and apply the latent variable techniques at the requiered places.
CO5 To apply the advanced analyse techniques in organizational decision making

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	3	2	-	-	1	3	2	3	-
CO2	2	2	3	2	-	-	1	3	2	3	-
CO3	2	2	3	2	-	-	1	3	2	3	-
CO4	2	2	3	2	-	-	1	3	2	3	-
CO5	2	2	3	2	-	-	1	3	2	3	-

MB1040 SOCIAL MEDIA AND WEB ANALYTICS

L	T	P	C
3	0	0	3

COURSE OBJECTIVES

- To understand the practices and technology involved in web marketing in real time business environment.

UNIT I INTRODUCTION TO WEB AND SOCIAL MEDIA **9**

Introduction - Web and social media - Website, Web apps - Social Media, Usability - User friendliness - Customer Experience - Web marketing, Competitive analysis - Web analytics framework - Analytics and outcomes, Competitive analysis. **CO1**

UNIT II BUSINESS ENVIRONMENT **9**

Data - Types of Data, primary data, secondary, Big Data - Data Analysis - tools used for analysis - descriptive statistics, comparing means, correlations, nonparametric tests **CO2**

UNIT III MEASURING USER EXPERIENCE **9**

Usability metrics - performance metrics, issues-based metrics, self-reported metrics - Planning and performing a usability study - study goals, user goals, metrics and evaluation methods, participants, data collection, data analysis, comparing alternative designs, comparing with competition, completing a task or transaction **CO3**

UNIT IV WEB ANALYSIS AND METRICS **9**

PULSE metrics on business and technical issues - Page views, Uptime, Latency, Seven-day active users HEART metrics - Happiness, Engagement, Adoption, Retention, and Task success on user behaviour issues - On-site web analytics, off-site web analytics, the goal-signal-metric process. **CO4**

UNIT V SOCIAL MEDIA ANALYTICS **9**

Social media analytics - Reasons for the growth - Social media KPIs - reach and engagement, Performing social media analytics - Business goal, KPIs, data gathering, analysis, measure and feedback **CO5**

TOTAL :45 PERIODS

TEXT BOOKS

1. Avinash Kaushik, Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity, John Wiley & Sons
2. Tom Tullis, Bill Albert, Measuring the User Experience: Collecting, Analyzing, and Presenting Usability Metrics, Morgan Kaufmann

REFERENCE BOOKS

1. Jim Sterne, Social Media Metrics: How to Measure and Optimize Your Marketing Investment, John Wiley & Sons.
2. Brian Clifton, Advanced Web Metrics with Google Analytics, John Wiley & Sons; 3rd Edition edition

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the web and social media and analyse.
CO2 To apply the analytical tools.
CO3 To analyse and evaluate the performance metrics.
CO4 To apply and analyse the issues of web analytics.
CO5 To create the KPI.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	3	2	-	-	1	3	2	3	-
CO2	2	2	3	2	-	-	1	3	2	3	-
CO3	2	2	3	2	-	-	1	3	2	3	-
CO4	2	2	3	2	-	-	1	3	2	3	-
CO5	2	2	3	2	-	-	1	3	2	3	-

OPERATIONS MANAGEMENT ELECTIVES

MB1028	LOGISTICS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES

- To learn the need and importance of logistics in product flow.

UNIT I Introduction **9**

Definition and Scope of Logistics – Functions & Objectives – Customer Value Chain–Service Phases and attributes – Value added logistics services – Role of logistics in Competitive strategy– Customer Service. **CO1**

UNIT II DISTRIBUTION CHANNELSAND OUTSOURCINGLOGISTICS **9**

Distribution channel structure - channel members, channel strategy, role of logistics and support in distribution channels. Logistics requirements of channel members; Logistics outsourcing– catalysts, benefits, value proposition, 3PL, 4PL, 5PL, 6PL. **CO2**

UNIT III TRANSPORTATION AND PACKAGING **9**

Transportation System – Evolution, Infrastructure and Networks. Freight Management –Vehicle Routing – Containerization; Modal Characteristics - Inter-modal Operators and Transport Economies; International Logistics-objectives, importance in global economy, Characteristics of global supply chains, Incoterms. Selection of service provider; Packaging - Design considerations, Material and Cost. Packaging as Unitisation. Consumer and Industrial Packaging. **CO3**

UNIT IV PERFORMANCE MEASUREMENT AND COSTS **9**

Performance Measurement – Need, System, Levels and Dimensions. Internal and External Performance Measurement. Logistics Audit. Total Logistics Cost – Concept, Accounting Methods: Cost – Identification, Time Frame and Formatting. **CO4**

UNIT V CURRENT TRENDS **9**

Logistics Information Systems – Need, Characteristics and Design. E-Logistics – Structure and Operation. Logistics Resource Management eLRM. Automatic Identification Technologies; Reverse Logistics – Scope, design and as a competitive tool. Global Logistics –Operational and Strategic Issues, ocean and air transportation. Strategic logistics planning; Green Logistics. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Bowersox Donald J, Logistics Management – The Integrated Supply Chain Process, Tata Mc GrawHill, 2010
2. RonaldH.Ballou,BusinessLogisticsandSupplyChainManagement,PearsonEducation,5th Edition, 2007

REFERENCE BOOKS

1. Sople Vinod V, Logistics Management: The Supply Chain Imperative, Pearson Education, 3rd Edition, 2012.
2. Coyleetal, The Management of Business Logistics, Thomson Learning, 7th Edition, 2004.
3. Ailawadi C Sathish & Rakesh Singh, Logistics Management,PHI,2005.
4. Bloomberg David Jetal., Logistics, Prentice Hall India, 2005.
5. Pierre David, International Logistics, Biztantra, 2003.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 Understand the concepts of logistics

CO2 Develop the skills in managing the distribution network and logistics partners to improve the supply chain practices

CO3 Analyse the impact of transportation on logistics operations including carrier selection, route

optimization freight consolidation and understanding the role of packaging in efficient logistics management

CO4 Understanding the importance of performance management and cost management in logistics including the role of performance metrics and cost analysis in improving the supply chain efficiency

CO5 Evaluate the impact of new technologies or market trends on logistics management practices

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	-	1	3	3	2	1
CO2	3	2	3	2	2	-	1	3	3	2	1
CO3	3	2	3	2	2	-	1	3	3	2	1
CO4	3	2	3	2	2	-	1	3	3	2	1
CO5	3	2	3	2	2	-	1	3	3	2	1

MB1029 MATERIALS MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES

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

UNIT I INTRODUCTION **9**

Operating environment-aggregate planning-role, need, strategies, costs techniques, approaches master scheduling-manufacturing planning and control system-manufacturing resource planning enterprise resource planning-making the production plan. **CO1**

UNIT II MATERIALS PLANNING **9**

Materials requirements planning-bill of materials-resource requirement planning-manufacturing resource planning-capacity management-scheduling orders-production activity control-codification. **CO2**

UNIT III INVENTORY MANAGEMENT **9**

Policy Decisions–objectives-control -Retail Discounting Model, Newsvendor Model; EOQ and EBQ models for uniform and variable demand with and without shortages -Quantity discount models. Probabilistic inventory models **CO3**

UNIT IV PURCHASING MANAGEMENT **9**

Establishing specifications-selecting suppliers-price determination-forward buying-mixed buying strategy-price forecasting- buying seasonal commodities- purchasing under uncertainty-demand management-price forecasting- purchasing under uncertainty-purchasing of capital equipment international purchasing. **CO4**

UNIT V WAREHOUSE MANAGEMENT **9**

Warehousing functions – types - Stores management-stores systems and procedures-incoming materials control-stores accounting and stock verification-Obsolete, surplus and scrap-value analysis-material handling-transportation and traffic management -operational efficiency productivity- cost effectiveness-performance measurement **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. S. N. Chary, Production and Operations Management, Tata McGraw Hill , 2012
2. J.R.Tony Arnold, Stephen N. Chapman, Lloyd M. Clive, Materials Management, Pearson, 2012.
3.

REFERENCE BOOKS

1. P. Gopalakrishnan, Purchasing and Materials Management, Tata McGraw Hill, 2012
2. A.K. Chitale and R.C. Gupta, Materials Management, Text and Cases, PHI Learning, 2nd Edition, 2006.
3. A.K. Datla, Materials Management, Procedure, Text and Cases, PHI Learning, 2nd Edition, 2006
4. Ajay K Garg, Production and Operations Management**,** Tata McGraw Hill , 2012
5. Ronald H. Ballou and Samir K. Srivastava, Business Logistics and Supply Chain Management, Pearson education, Fifth Edition.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the concepts and techniques in materials management

CO2 To understand the concept of materials planning and apply it for optimized ordering of materials

CO3 To understand and apply inventory management models for optimization of inventory

CO4 To understand and analyse purchase decisions during certainty and uncertainty scenarios

CO5 To remember and understand warehousing function and apply the concepts for efficient warehousing

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	2	-	-	1	3	3	2	1
CO2	3	2	3	2	-	-	1	3	3	2	1
CO3	3	2	3	2	-	-	1	3	3	2	1
CO4	3	2	3	2	-	-	1	3	3	2	1
CO5	3	2	3	2	-	-	1	3	3	2	1

MB1030 PRODUCT DESIGN

L	T	P	C
3	0	0	3

OBJECTIVES

- To understand the application of structured methods to develop a product.

UNIT I PRODUCT DESIGN & DEVELOPMENT **9**

Product design & development - characteristics, duration and cost, challenges; Development Process - Generic Process, Concept development, Adapting to product types; Product Planning - Process, Understanding customer need, Product Specification; Concept Generation Evaluation - decay curve, cost expenditure curve; Technology Life Cycle; Disruptive Technologies. **CO1**

UNIT II PRODUCT CONCEPT **9**

Concept Selection – Importance, Methodology, concept Screening, Concept Scoring, Concept **CO2**

Testing; Product Architecture - Definition, Modularity, implication, Establishment, Delayed Differentiation, Platform Planning.

UNIT III PRODUCT DATA MANAGEMENT **9**

PDM - concept and benefits, functions, Product data and workflow, Product reliability, CIM data, Architecture of PDM systems, Product data interchange, Portal integration, PDM acquisition and implementation; Product Life Cycle management - strategy, Change management for PLM. **CO3**

UNIT IV DESIGN TOOLS **9**

Design Approaches - Industrial Design, Design for Manufacturing, Value Engineering, Ergonomics, Robust Design, Design for Excellence; Collaborative Product development-Prototyping, failure rate curve, product use testing-Product development economics, scoring model, financial analysis. **CO4**

UNIT V PATENTS **9**

Intellectual Property and Patents -Definitions, Patent Searches, Application, Patent Ownership and Transfer, Patent Infringement, New Developments and International Patents. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Karl T. Ulrich, Steven D. Eppinger, Anita Goyal Product Design and Development, Tata McGraw – Hill, Fourth Edition, reprint 2009.

REFERENCE BOOKS

1. Kenneth B. Kahn, New Product Planning, Sage, 2010.
2. A.K. Chitale and R.C. Gupta, Product Design and Manufacturing, PHI, 2008.
3. Deborah E. Bouchoux, Intellectual Property Rights, Delmar, Cengage Learning, 2005.
4. Michael Grieves, Product Life Cycle Management, Tata McGraw Hill, 2006.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the needs of the customers and thereby develop characteristics of product to be designed
CO2 To understand and analyze the methodology in the selection of product concept
CO3 To analyze and evaluate the product data management and its implementation
CO4 To apply the various tools available for design of product
CO5 To understand the concept of patenting for new products and its procedure

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	1	3	3	2	1
CO2	3	2	3	2	2	2	1	3	3	2	1
CO3	3	2	3	2	2	2	1	3	3	2	1
CO4	3	2	3	2	2	2	1	3	3	2	1
CO5	3	2	3	2	2	2	1	3	3	2	1

MB1031 **PROJECT MANAGEMENT** **L T P C**
3 0 0 3

OBJECTIVES

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

UNIT I INTRODUCTION TO PROJECT MANAGEMENT **9**

Project Management – Definition –Goal - Lifecycles. Project Environments. Project Manager – Roles- Responsibilities and Selection. **CO1**

UNIT II PLANNING, BUDGETING AND RISK MANAGEMENT **9**

The Planning Process – Work Break down Structure. Cost Estimating and Budgeting - Process, Summaries, schedules and forecasts. Managing risks - concepts, identification, assessment and response planning. **CO2**

UNIT III SCHEDULING & RESOURCE ALLOCATION **9**

PERT & CPM Networks - Project durations and floats - Crashing – Resource loading and leveling. Simulation for resource allocation. Goldratt's Critical Chain **CO3**

UNIT IV PROJECT ORGANISATION & CONFLICT MANAGEMENT **9**

Formal Organization Structure – Organization Design – Types of project organizations. Conflict – Origin & Consequences. Project Teams. Managing conflict – Team methods for resolving conflict. **CO4**

UNIT V CONTROL AND COMPLETION **9**

Project Control – Process, Monitoring, Internal and External control, Performance analysis, Performance Index Monitoring. Project Evaluation, Reporting and Termination. Project success and failure - Lessons. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Clifford Gray and Erik Larson, Project Management, Tata McGraw Hill Edition, 2005.

REFERENCE BOOKS

1. John M. Nicholas, Project Management for Business and Technology - Principles and Practice, Second Edition, Pearson Education, 2006.
2. Gido and Clements, Successful Project Management, Second Edition, Thomson Learning, 2003.
3. Samuel J.M., Jack R.M., Scott M.S., Margaret M.S., and Gopalan M.R., Project Management, First Indian edition, Wiley-India, 2006.
4. Harvey Maylor, Project Management, Third Edition, Pearson Education, 2006.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the characteristics of project and teams and various stages of a project.
CO2 To create the work breakdown structure and understand the fundamentals of cost and budget estimation methods
CO3 To analyze the ways of completing projects on time and scheduling resources effectively
CO4 To understand the organization structure & critically analyze conflicts and ways of resolving conflicts
CO5 To understand reporting and control methods

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	-	-	3	3	3	-

CO2	3	3	3	2	2	-	-	3	3	3	-
CO3	3	3	3	2	2	-	-	3	3	3	-
CO4	3	3	3	2	2	-	-	3	3	3	-
CO5	3	3	3	2	2	-	-	3	3	3	-

MB1032 SERVICE OPERATIONS MANAGEMENT

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

OBJECTIVES

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

UNIT I INTRODUCTION **9**

Services – Importance, role in economy, service sector – nature, growth. Nature of services - distinctive characteristics, Service Package, Service classification, service-dominant logic, open systems view. Service Strategy –Strategic service vision, competitive environment, generic strategies, winning customers; Role of information technology; stages in service firm competitiveness. **CO1**

UNIT II SERVICE DESIGN **9**

New Service Development – Design elements – Service Blue-printing - process structure – generic approaches. Service Encounter – triad, creating service orientation, service profit chain; Front office Back-office Interface– service decoupling. Technology in services – self-service, automation, e-commerce, e-business, technology innovations. **CO2**

UNIT III SERVICE QUALITY **9**

Service Quality- Dimensions, Service Quality Gap Model; Measuring Service Quality – SERVQUAL, Walk-through Audit, Quality service by design , Service Recovery, Service Guarantees. Process Improvement –productivity improvement - DEA, quality tools, benchmarking, Quality improvement programs. **CO3**

UNIT IV SERVICE FACILITY **9**

Supporting facility -Service scape, Facility design – nature, objectives, process analysis, service facility layout. Service Facility Location – considerations, facility location techniques – metropolitan metric, Euclidean, centre of gravity, retail outlet location, location set covering problem. Vehicle routing and Scheduling. **CO4**

UNIT V MANAGING CAPACITY AND DEMAND **9**

Managing Demand – strategies; Managing capacity – basic strategies, supply management tactics, operations planning and control; Yield management; Inventory Management in Services– Retail Discounting Model, Newsvendor Model; Managing Waiting Lines –Queuing systems, psychology of waiting; Managing for growth- expansion strategies, franchising , globalization. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. James A. Fitzsimmons, Mona J, Fitzsimmons, Sanjeev Bordoloi, Service Management – Operations, Strategy, Information Technology, McGraw-Hill Education – 8th Edition 2018.

REFERENCE BOOKS

1. Richard D. Metters, Successful Service Operations Management, Cengage Learning, 2nd Edition, 2012.
2. Cengiz Haksever, Barry Render, Service Management, Pearson Education, 2013.
3. Robert Johnston, Graham Clark, Service Operations Management, Pearson Education, 2ndEdition, 2005.
4. Bill Hollins and Sadie Shinkins, Managing Service Operations, Sage, 2006.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the various concepts Services and apply the classification , strategy and role of information technology

CO2 To analyze the role of technological innovations with regards to business

CO3 To create service quality using models like SERVQUAL and analyze the process improvement and quality tools with respect to business standards

CO4 To apply and analyse various facility design , routing and scheduling

CO5 To analyse the real world applications and create automated models to be on par with the industry standards.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	2	-	3	3	3	-
CO2	3	3	3	2	2	2	-	3	3	3	-
CO3	3	3	3	2	2	2	-	3	3	3	-
CO4	3	3	3	2	2	2	-	3	3	3	-
CO5	3	3	3	2	2	2	-	3	3	3	-

MB1033 SUPPLY CHAIN MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES

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

UNIT I INTRODUCTION **9**

Supply Chain – Fundamentals –Evolution- Role in Economy - Importance - Decision Phases - Supplier- Manufacturer-Customer chain. - Enablers/ Drivers of Supply Chain Performance; Supply chain strategy - Supply Chain Performance Measures. **CO1**

UNIT II STRATEGIC SOURCING **9**

Outsourcing – Make Vs buy - Identifying core processes - Market Vs Hierarchy - Make Vs buy continuum -Sourcing strategy - Supplier Selection and Contract Negotiation. Creating a world class supply base- Supplier Development - World Wide Sourcing. **CO2**

UNIT III SUPPLY CHAIN NETWORK **9**

Distribution Network Design – Role - Factors Influencing Options, Value Addition – Distribution Strategies - Models for Facility Location and Capacity allocation. Distribution Center Location Models - Supply Chain Network optimization models; Impact of uncertainty on Network Design - Network Design decisions using Decision trees. **CO3**

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

Managing supply chain cycle inventory. Uncertainty in the supply chain –- Analyzing impact of supply chain redesign on the inventory - Risk Pooling - Managing inventory for short life – cycle products - multiple item -multiple location inventory management. Pricing and Revenue Management **CO4**

UNIT V CURRENT TRENDS **9**

Supply Chain Integration, SC process restructuring, IT in Supply Chain; Agile Supply Chains, Leagile supply chain, Green Supply Chain, Reverse Supply chain; Supply chain **CO5**

technology trends – AI, Advanced analytics, Internet of Things, Intelligent things, conversational systems, robotic process automation, immersive technologies, Blockchain.

TOTAL : 45 PERIODS

TEXT BOOKS

2. Sunil Chopra, Peter Meindl and Dharam VirKalra, Supply Chain Management-Strategy Planning and Operation, Pearson Education, Sixth Edition, 2016.
3. Ballou Ronald H, Business Logistics and Supply Chain Management, Pearson Education, 5thEdition, 2007.

REFERENCE BOOKS

2. Janat Shah, Supply Chain Management – Text and Cases, Pearson Education, 2009
3. David Simchi-Levi, Philip Kaminsky, Edith Simchi-Levi, Designing and Managing the Supply Chain: Concepts, Strategies, and Cases, Tata McGraw-Hill, 2005.
4. Pierre David, International Logistics, Biztantra, 2003.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand and remember the concepts of Supply Chain and strategy formulation
CO2 To analyse the sourcing strategy for better decision making
CO3 To understand the different supply chain network models and evaluate the distribution network design using these optimization models
CO4 To analyse inventory decisions in supply chain
CO5 To understand the application of latest trends for better supply chain management practices

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	-	1	3	3	3	1
CO2	3	3	3	2	2	-	1	3	3	3	1
CO3	3	3	3	2	2	-	1	3	3	3	1
CO4	3	3	3	2	2	-	1	3	3	3	1
CO5	3	3	3	2	2	-	1	3	3	3	1

MB1034 QUALITY MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES

- To learn the quality philosophies and tools in the managerial perspective.

UNIT I INTRODUCTION **9**

Quality – vision, mission and policy statements. Customer Focus – customer perception of quality, Translating needs into requirements, customer retention. Dimensions of product and service quality. Cost of quality. **CO1**

UNIT II PRINCIPLES AND PHILOSOPHIES OF QUALITY MANAGEMENT **9**

Overview of the contributions of Deming, Juran Crosby, Masaaki Imai, Feigenbaum, Ishikawa, Taguchi techniques – introduction, loss function, parameter and tolerance design, signal to noise ratio. Concepts of Quality circle, Japanese 5S principles and 8D methodology. **CO2**

UNIT III STATISTICAL PROCESS CONTROL **9**

Meaning and significance of statistical process control (SPC) – construction of control charts for variables and attributed. Process capability – meaning, significance and measurement – Six sigma - concepts of process capability. Reliability concepts – definitions, reliability in series and parallel, product life characteristics curve. Total productive maintenance (TMP), Terotechnology. Business process Improvement (BPI) – principles, applications, reengineering process, benefits and limitations. **CO3**

UNIT IV TOOLS AND TECHNIQUES FOR QUALITY MANAGEMENT 9

Quality functions development (QFD) – Benefits, Voice of customer, information organization, House of quality (HOQ), building a HOQ, QFD process. Failure mode effect analysis (FMEA) – requirements of reliability, failure rate, FMEA stages, design, process and documentation. Seven Tools (old & new). Bench marking and POKA YOKE. **CO4**

UNIT V QUALITY SYSTEMS ORGANIZING AND IMPLEMENTATION 9

Introduction to IS/ISO 9004:2000 – quality management systems – guidelines for performance improvements. Quality Audits. TQM culture, Leadership – quality council, employee involvement, motivation, empowerment, recognition and reward - TQM framework, benefits, awareness and obstacles. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Dale H.Besterfield, Carol Besterfield – Michna, Glen H. Besterfield, Mary Besterfield – Sacre, Hermant – Urdhwareshe, Rashmi Urdhwareshe, Total Quality Management, Revised Third edition, Pearson Education, 2011
2. Shridhara Bhat K, Total Quality Management – Text and Cases, Himalaya Publishing House, II Edition 2010

REFERENCE BOOKS

1. Douglas C. Montgomory, Introduction to Statistical Quality Control, Wiley Student Edition, 4th Edition, Wiley India Pvt. Limited, 2008.
2. James R. Evans and William M. Lindsay, The Management and Control of Quality,Sixth Edition, Thomson, 2005.
3. Poornima M.Charantimath, Total Quality Management, Pearson Education, Second Edition , 2011
4. Indian standard – quality management systems – Guidelines for performance improvement (Fifth Revision), Bureau of Indian standards, New Delhi.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the need for quality, evaluate the dimensions of quality and create quality products and services that delights the customers.
CO2 To understand the principles and philosophies contributed by quality gurus and apply in practice.
CO3 To evaluate the quality of process product and service using TQM tools and statisticals methods.
CO4 To analyse customer needs and create quality products and services that delights the customers by applying TQM tools.
CO5 To apply quality standards.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	-	-	3	3	3	-

CO2	3	2	3	2	2	-	-	3	3	3	-
CO3	3	2	3	2	2	-	-	3	3	3	-
CO4	3	2	3	2	2	-	-	3	3	3	-
CO5	3	2	3	2	2	-	-	3	3	3	-

SYSTEMS MANAGEMENT ELECTIVES

MB1035 **e–BUSINESS** **L T P C**
3 0 0 3

OBJECTIVES

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

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

e-business, e-business Vs e-commerce, Economic forces - advantages - myths - e-business models, design, develop and manage business, Web2.0 and Social Networking, Mobile Commerce, S-commerce **CO1**

UNIT II TECHNOLOGY INFRASTRUCTURE **10**

Internet and World Wide Web, internet protocols - FTP, intranet and extranet, Information publishing technology - basics of web server hardware and software **CO2**

UNIT III BUSINESS APPLICATIONS **10**

Consumer oriented e-business - e-tailing and models - Marketing on web - advertising - e-mail marketing, affiliated programs - e-CRM; online services, Business oriented e-business, governance, EDI on the internet, Delivery management system, Web Auctions, Virtual communities and Web portals - Social media marketing **CO3**

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

E-payments - Characteristics of payment of systems, protocols, e-cash, e cheque and Micro payment systems - internet security - cryptography - security protocols - network security **CO4**

UNIT V LEGAL AND PRIVACY ISSUES **8**

Legal, Ethics and privacy issues - Protection needs and methodology - consumer protection, cyberlaws, contract sand warranties, Taxation and encryption policies. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. Harvey M.Deitel, Paul J.Deitel, Kate Steinbuhler, e – business and e – commerce for managers, Pearson, 2011.
2. Efraim Turban, Jae K.Lee, David King, Ting Peng Liang, Deborrah Turban, Electronic Commerce– A managerial perspective, Pearson Education Asia, 2010.
3. Parag Kulkarni, Sunita Jahirabadkao, Pradeep Chande, ebusiness, Oxford University Press,2012.

REFERENCE BOOKS

1. Hentry Channel, E-Commerce – fundamentals and Applications, Wiley India Pvt Ltd, 2007.
2. Gary P.Schneider, Electronic commerce, Thomson course technology, Fourth annual edition, 2007
3. Bharat Bhasker, Electronic Commerce Frame work technologies and Applications, 3rdEdition. Tata McGraw Hill Publications, 2009
4. Kamlesh K.Bajaj and Debjani Nag, Ecommerce - the cutting edge of Business,Tata McGraw Hill Publications, 7th reprint, 2009.
5. Kalakotaetal, Frontiers of Electronic Commerce, Addison Wesley, 2004
6. Micheal Papaloelon and Peter Robert, e-business, WileyIndia, 2006.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the various concepts of E-business and to create the designs and business models
CO2 To create different technology infrastructure and analyze basics of web server, hardware and software
CO3 To analyze various business applications and understand virtual communities and web portals
CO4 To analyze the tools for e-business and create cryptography and network security for payment systems
CO5 To analyse the legal and privacy issues and understand the cyber laws with regards to taxation and encryption policies.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	2	1	1	-	-	1	2	2	-
CO2	2	2	2	1	1	-	-	1	2	2	-
CO3	2	2	2	1	1	-	-	1	2	2	-
CO4	2	2	2	1	1	-	-	1	2	2	-
CO5	2	2	2	1	1	-	-	1	2	2	-

MB1036 ENTERPRISE RESOURCE PLANNING

L	T	P	C
3	0	0	3

OBJECTIVES

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

UNIT I INTRODUCTION **8**

Overview of enterprise systems – Evolution – Risks and benefits – Fundamental technology – warehouse management. **CO1**

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

Overview of ERP software solutions, BPR, Project management, Functional Modules - Organisational data, master data and document flow. **CO2**

UNIT III ERP IMPLEMENTATION **10**

Planning Evaluation and selection of ERP systems – Implementation lifecycle-ERP implementation, Methodology and Framework – Training – Data Migration. People Organization in implementation - Consultants, Vendors and Employees. **CO3**

UNIT IV POST IMPLEMENTATION **8**

Maintenance of ERP - Organizational and Industrial impact; Success and Failure factors of ERP Implementation. **CO4**

UNIT V EMERGING TRENDS ON ERP **9**

Extended ERP systems and ERP add-ons - CRM, SCM, Business analytics – Future trends in ERP systems – web enabled, Wireless technologies, cloud computing and Augmented reality. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. Alexis Leon, ERP demystified, second Edition Tata McGraw - Hill, 2008.
2. Simha R.Magal, JeffreyWord, Integrated Business processes with ERP systems, John Wiley & Sons, 2012.
3. Jagan Nathan Vaman, ERP in Practice, Tata McGraw - Hill, 2008

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, 2006.
4. Summer, ERP, Pearson Education, 2008.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand risk and benefits associated with Enterprise Resource Planning.
CO2 To design and develop ERP solutions and functional modules
CO3 To analyse and implement ERP
CO4 To analyse and evaluate the post implementation of ERP.
CO5 To have knowledge of emerging trends on ERP

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	2	1	1	-	-	1	2	2	-
CO2	2	2	2	1	1	-	-	1	2	2	-
CO3	2	2	2	1	1	-	-	1	2	2	-
CO4	2	2	2	1	1	-	-	1	2	2	-
CO5	2	2	2	1	1	-	-	1	2	2	-

MB1037 SOFTWARE PROJECT AND QUALITY MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES

- To create and understanding on methodologies, tools, techniques, metrics, quality and risk issues in software project management.
- To provide the knowledge and necessary skills for taking up quality related task in Software projects.

UNIT I SPM CONCEPTS **9**

Definition – components of SPM – challenges and opportunities – tools and techniques – managing human resource and technical resource – costing and pricing of projects – training and development–project management techniques. **CO1**

UNIT II SOFTWARE MEASUREMENTS **9**

Monitoring & measurement of SW development – cost, size and time metrics – methods and tools for metrics – issues of metrics in multiple projects. **CO2**

UNIT III SOFTWARE QUALITY AND RISK ISSUES **9**

Quality in SW development – quality assurance – quality standards and certifications. The risk issues in SW development and implementation – identification of risks – resolving and avoiding risks – tools and methods for identifying risk management. **CO3**

UNIT IV QUALITY PLANNING **9**

Planning Concepts - Integrating Business and Quality Planning - Prerequisites to Quality Planning **CO4**

-The Planning Process. Define, Build, Implement and Improve Processes: Process Management Concepts - Process Management Processes.

UNIT V QUALITY CONTROL PRACTICES **9**

Testing Concepts – Developing Testing Methodologies – Verification and Validation Methods - Software Change Control – Defect Management. Metrics and Measurement: Measurement Concepts - Measurement in Software - Variation and Process Capability - Risk Management - Implementing a Measurement Program. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. Roger S. Pressman, Software Engineering A Practioners Approach, McGraw Hill International Edition, New Delhi, 7thEdition, 2010
2. Richard H. Thayer(Edited), Software Engineering Project Management, IEEE, John Wiley & Sons, 2nd edition, 2000

REFERENCE BOOKS

1. Bob Hughes, Mike Cotterell and Rajib Mall, Software Project Management, McGraw Hill Publishing Company, 6th Edition, 2017
2. Alan Gillies, Software Quality – Theory and Management, Thomson Learning, 3rd edition, 2011.
3. Stephen Kan, Metrics and Models in Software Quality Engineering, Pearson Education Asia, 8th Impression 2009.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 Understand and apply the project management concepts & techniques.
CO2 To analyse & evaluate the software development process.
CO3 Understand the risk issues in software development.
CO4 Apply the concepts in preparing the quality plan & documents.
CO5 Analyse and evaluate the quality of software product.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	2	1	1	-	-	1	2	2	-
CO2	2	2	2	1	1	-	-	1	2	2	-
CO3	2	2	2	1	1	-	-	1	2	2	-
CO4	2	2	2	1	1	-	-	1	2	2	-
CO5	2	2	2	1	1	-	-	1	2	2	-

MB1038 INTERNET OF THINGS **L T P C**
3 0 0 3

OBJECTIVES

- To experiment the technical aspects of Internet of Things.
- To expose the application of Internet of Things.

UNIT I INTRODUCTION **9**

Introduction to Internet of Things - Physical Design of IoT - Logical Design of IoT - IoT Enabling Technologies - IoT Levels and Deployment Templates - Domain Specific to IoTs. **CO1**

UNIT II IoT ARCHITECTURE **9**

ETSI, IETF, OGC architectures - IoT reference model - Domain model - information model - functional model – communication model - IoT reference architecture **CO2**

UNIT III BUILDING IoT **9**

IoT Systems - Logical Design using Python - IoT Physical Devices and Endpoints: What is an IoT Device - Basic building blocks of an IoT device - Exemplary Device: Raspberry Pi - Programming Rash berry Pi with Python - Other IoT Devices **CO3**

UNIT IV IoT DATA PLATFORM **9**

Data Analytics for IoT: Introduction - Apache Hadoop - Using Hadoop Map Reduce for Batch Data Analysis – Apache Oozie – Apache Spark – Tools for IoT- Introduction - Chef: Setting up Chef. **CO4**

UNIT V CASE STUDIES AND REAL-WORLD APPLICATIONS **9**

IoT Physical Servers & Cloud Offerings - Case Studies Illustrating IoT Design: Introduction - Home Automation – Smart Cities – Environment – Agriculture – Productivity Applications. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. Arshdeep Bahga, Vijay Madisetti, - Internet of Things – A hands - on approach, University Press, 2015
2. Dieter Uckelmann, Mark Harrison, Michahelles, Florian (Eds), - Architecting the Internet of Things‖, Springer, 2011.
3. Honbo Zhou, ―The Internet of Things in the Cloud: A Middleware Perspective‖, CRC Press, 2012.

REFERENCE BOOKS

1. Jan Holler, Vlasios Tsiatsis, Catherine Mulligan, Stamatis, Karnouskos, Stefa Aves and David Boyle, "From Machine-to-Machine to the Internet of Things - Introduction to a New Age of Intelligence", Elsevier, 2014.
2. Olivier Hersent, David Boswarthick, Omar Elloumi, - The Internet of Things –Key applications and Protocols‖, Wiley, 2012
3. Adrian McEwen and Hakim Cassimally, “Designing the Internet of Things”, John Wiley & Sons, 2013.
4. Cuno Pfister, “Getting Started with the Internet of Things: Connecting Sensors and Micro controllers to the Cloud”, Maker Media, 2011.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the various concepts of IOT used in different organisations and to provide the designs of IOT for various purposes.

CO2 To Create different IOT Models and analyse the business problems and give solution

CO3 To create Logical design using Python and building blocks of an IOT device

CO4 To analyze the tools for IOT and apply various data analytics tools for batch data analysis

CO5 To analyse the real world applications and create automated design to be on par with the industry standards.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	2	1	1	-	-	1	2	2	-

CO2	2	2	2	1	1	-	-	1	2	2	-
CO3	2	2	2	1	1	-	-	1	2	2	-
CO4	2	2	2	1	1	-	-	1	2	2	-
CO5	2	2	2	1	1	-	-	1	2	2	-

MB1039 ADVANCED DATABASE MANAGEMENT SYSTEM

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

OBJECTIVES

- To understand the various advanced databases used in the organization
- To be aware of recent trends in database management.

UNIT I SPM CONCEPTS **9**

DBMS Models - Multimedia Databases, Parallel Databases, embedded, web, spatial, temporal databases, Virtualization, Active Databases - Embedded databases - Web databases. **CO1**

UNIT II SOFTWARE MEASUREMENTS **9**

Query Processing basics and optimization – Heuristic Optimization – Transactions Models – Concurrency Control – Recovery – Security and Authorization – Storage – Indexing and Hashing – ISAM – B-Trees –Kd Trees –X Trees – Dynamic Hashing. **CO2**

UNIT III DISTRIBUTED DATABASES **9**

Distributed Databases – Queries – Optimization Access Strategies – Distributed Transactions Management – Concurrency Control – Reliability **CO3**

UNIT IV OBJECT ORIENTED DATABASES **9**

Object Oriented Concepts – Data Object Models – Object Oriented Databases – Issues in OODBMS – Object Oriented Relational Databases – Object Definition Languages – Object Query Languages **CO4**

UNIT V EMERGING TRENDS **9**

Data Mining – Data warehousing – Star, Snowflake, Fact Constellation; open source database systems, Scripting Language, JDBC, ODBC **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. Peter Rob, Carlos Coronel, Database System and Design, Implementation and Management, 8th edition, Cengage,
2. Ramez Elmasri and Shamkant B. Navethe, Fundamentals of Database Systems,7th edition, Pearson Education, 2015.
3. Jeffrey A Hofferetal, Modern Database Management,12th Edition, PearsonEducation,2016,
4. Abraham Silberchatz, Henry F. Korth and S.Sudarsan, Database System Concepts, 6th Edition, McGraw-Hill, 2015.

REFERENCE BOOKS

1. Thomas M. Connolly and Carolyn E. Begg, Database Systems – A Practical Approach to Design, Implementation and Management, 6th edition, Pearson Education, 2015.
2. Jefrey D. Ullman and Jenifer Widom, A First Course in Database Systems, 3rd edition, Pearson Education Asia, 2013.
3. Stefano Ceri and Giuseppe Pelagatti, Distributed Databases Principles and Systems, McGraw-Hill International Editions, 2008.
4. Rajesh Narang, Object Oriented Interfaces and Databases, 1st edition, Prentice Hall of India ,2004.
5. Mark L.Gillenson & el, Introduction to database management, 2ndedition, Wiley India Pvt. Ltd,2012

6. Charkrabarti, Advanced Database Management Systems, WileyIndiaPvtLtd,2011

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To apply different databases for various purposes.
CO2 To apply the steps in database query processing with the objective of accessing the data from the database.
CO3 To analyze the concepts of databases used in different locations with the intricacies of data access and providing data security in various networks.
CO4 To analyze the insights in Object Oriented Database structure with different models to store and retrieve the data from different models in an organisation.
CO5 To evaluate the data mining and data ware housing.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	2	1	1	-	-	1	2	2	-
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CO3	2	2	2	1	1	-	-	1	2	2	-
CO4	2	2	2	1	1	-	-	1	2	2	-
CO5	2	2	2	1	1	-	-	1	2	2	-

NON – FUNCTIONAL ELECTIVES

MB1211 ENTREPRENEURSHIP DEVELOPMENT **L T P C**
3 0 0 3

OBJECTIVES

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

UNIT I ENTREPRENEURAL COMPETENCE **9**

Entrepreneurship concept–Entrepreneurship as a Career–Entrepreneurial Personality-Characteristics of Successful Entrepreneurs–Knowledge and Skills of an Entrepreneur. **CO1**

UNIT II ENTREPRENEURAL ENVIRONMENT **9**

Business Environment-Role of Family and Society-Entrepreneurship Development Training and Other Support Organisational Services-Central and State Government Industrial Policies and Regulations. **CO2**

UNIT III BUSINESS PLAN PREPARATION **9**

Sources of Product for Business-Prefeasibility Study-Criteria for Selection of Product-Ownership-Capital Budgeting- Project Profile Preparation-Matching Entrepreneur with the Project-Feasibility Report Preparation and Evaluation Criteria. **CO3**

UNIT IV LAUNCHING OF SMALL BUSINESS **9**

Finance and Human Resource Mobilisation - Operations Planning - Market and Channel **CO4**

Selection-Growth Strategies -Product Launching–Incubation, Venture capital, Start-ups.

UNIT V MANAGEMENT OF SMALL BUSINESS **9**

Monitoring and Evaluation of Business - Business Sickness - Prevention and Rehabilitation of Business Units -Effective Management of small Business-Case Studies. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. S.S.Khanka, Entrepreneurial Development, S.Chand and Company Limited, New Delhi, 2016.
2. R.D. Hisrich, Entrepreneurship, Tata Mc Graw Hill, NewDelhi, 2018.
3. Rajeev Roy, Entrepreneurship, OxfordUniversityPress, 2nd Edition,2011.
4. Donald F Kuratko, T.V Rao. Entrepreneurship: A South Asian perspective. Cengage Learning, 2012.

REFERENCE BOOKS

1. Dr. Vasant Desai, "Small Scale Industries and Entrepreneurship", HPH, 2006.
2. Arya Kumar. Entrepreneurship, Pearson, 2012.
3. Prasanna Chandra, Projects Planning, Analysis, Selection, Implementation and Reviews, Tata McGraw-Hill, 8th edition, 2017.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the concepts of entrepreneurial competence to run the business efficiently.

CO2 To apply the various entrepreneurial policies and regulations based on the entrepreneurial environment.

CO3 To analyse the capable of preparing business plan and undertake feasible projects.

CO4 To create and develop their business ventures successfully.

CO5 To evaluate and monitor the business effectively towards growth and development.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	2	1	1	2	1	3	3	2	-
CO2	3	2	2	2	1	2	1	3	3	2	-
CO3	3	2	2	2	1	2	1	3	3	2	-
CO4	3	2	2	2	1	2	1	3	3	2	-
CO5	3	2	2	2	1	2	1	3	3	2	-

MB1212 BUSINESS ETHICS AND CORPORATE GOVERNANCE **L T P C**
3 0 0 3

OBJECTIVES

- To have grounding on theory through the understanding of real-life situations and cases.

UNIT I INTRODUCTION **9**

Definition & nature Business ethics, Characteristics, Ethical theories; Causes of unethical behavior; Ethical abuses; Work ethics; Code of conduct; Public good. **CO1**

UNIT II ETHICS THEORY AND BEYOND **9**

Management of Ethics - Ethics analysis [Hosmer model]; Ethical dilemma; Ethics in practice - ethics for managers; Role and function of ethical managers- Comparative ethical behaviour of managers; Code of ethics; Competitiveness, organizational size, profitability and ethics; Cost of ethics in Corporate ethics evaluation. Business and ecological / environmental issues in the Indian context and case studies. **CO2**

UNIT III LEGAL ASPECTS OF ETHICS **9**

Political – legal environment; Provisions of the Indian constitution pertaining to Business; Political setup – major characteristics and their implications for business. Social – cultural environment and their impact on business operations, Salient features of Indian culture and values. **CO3**

UNIT IV ENVIRONMENTAL ETHICS **9**

Economic Environment; Philosophy of economic grow and its implications for business, Main features of Economic Planning with respect to business; Industrial policy and framework of government contract over Business; Role of chamber of commerce and confederation of Indian Industries. **CO4**

UNIT V CORPORATE SOCIAL RESPONSIBILITY AND GOVERNANCE **9**

Definition- Evolution- Need for CSR; Theoretical perspectives; Corporate citizenship; Business practices; Strategies for CSR; Challenges and implementation; Evolution of corporate governance; Governance practices and regulation; Structure and development of boards; Role of capital market and government; Governance ratings; Future of governance- innovative practices; Case studies with lessons learnt. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. S.A. Sherlekar, Ethics in Management, Himalaya Publishing House, 2009.
2. William B. Werther and David B. Chandler, Strategic corporate social responsibility, Sage Publications Inc., 2011
3. Robert A.G. Monks and Nell Minow, Corporate governance, John Wiley and Sons, 2011.

REFERENCE BOOKS

1. W.H. Shaw, Business Ethics, Cengage Learning, 2007.
2. Beeslory, Michel and Evens, Corporate Social Responsibility, Taylor and Francis, 1978.
3. Philip Kotler and Nancy Lee, Corporate social responsibility: doing the most good for company and your cause, Wiley, 2005.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand ethical issues in workplace and be able to find solution.
CO2 To understand ethical issues and the behavior to be followed in the corporate.
CO3 To understand ethical issues in legal and social environment.
CO4 To analyse ethical issues in economic and political environment.
CO5 To evaluate ethical issues and practices in CSR.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	2	1	-	-	1	3	3	2	3
CO2	3	2	2	1	-	-	1	3	3	2	3
CO3	3	2	2	1	-	-	1	3	3	2	3
CO4	3	2	2	1	-	-	1	3	3	2	3
CO5	3	2	2	1	-	-	1	3	3	2	3

MB1213 EVENT MANAGEMENT

L	T	P	C
3	0	0	3

OBJECTIVES

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

UNIT I EVENT CONTEXT **9**

History& Evolution–Types of events–MICE Types of Meeting, Trade Shows, Conventions, Exhibitions- Structure of event industry – Event Management as a profession –Perspectives on event: Government, Corporate & Community – Code of Ethics. **CO1**

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

Conceptualizing the event – Host, sponsor, Media, Guest, Participants, Spectators – Crew – Design of concept – Theme and content development – Visualization – Event objectives –Initial planning – Budgeting – Event design and budget checklist – Preparation of functionalsheets– Timing–ContractsandAgreements–Insurance, Regulation,Licence and Permits-–Negotiation. **CO2**

UNIT III EVENT MARKETING **9**

Role of StrategicMarketingPlanning-Pricing–MarketingCommunicationMethods& budget – Elements of marketing communication – Managing Marketing Communication –Role of Internet – Sponsorship – Event sponsorship – Strategy – Managing Sponsorships –Measuring& Evaluating sponsorship. **CO3**

UNIT IV EVENT OPERATION **9**

Site Selection–Types of location–Venue Requirements–Room, Stage, Audi- Visual, Lighting, Performers, Decors, Caterer, Photography & Videography – Protocols – Guest list –Guest demographics – Children at event – Invitation – Media – Freelance Event Operation –Road show - Food & Beverage – Entertainment – Event Logistics – Supply of facilities –Onsite logistics– Control of event logistics– Evaluation & Logistics. **CO4**

UNIT V SAFETY & EVENT EVALUATION **9**

Risk assessment–Safety officer, Medical Manager –Venue, Structural safety –Food safety –Occupational safety–Fire Prevention–Sanitary facilities–Vehicle traffic Waste Management.EventImpact–EventEvaluationProcess–ServiceQuality-CustomerSatisfaction. **CO5**

TOTAL: 45 PERIODS

TEXT BOOKS

1. Lynn Van Der Wagen, Event Management for Tourism, Cultural Business & SportingEvents,4th Edition, Pearson Publications, 2014.
2. Lynn Van Der Wagen, & Brenda R. Carlos, Successful Event Management.

3. Judy Allen, Event Planning2nd Edition, Wiley &Sons, Canada, 2014.
4. G.A.J. Bowdin, Event Management, Elseiver Butterworth
5. JohnBeech, Sebastian Kaiser & Robert Kaspar, The Business of Events Management, Pearson Publication, 2014.

REFERENCE BOOKS

1. Judy, Event Planning Ethics and Etiquette: A Principled Approach to the Business of Special Event Management, 2014.
2. Shannon Kilkenny, The complete guide to successful event planning.
3. Julia Ruther ford Silvers, Professional Event Coordination, The Wiley Event Management Series. Allison, The Event Marketing Handbook: Beyond Logistics& Planning

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand the evolution of event management and their types.

CO2 To create event plans and analyse various activities relating to implementation of events and create budgets.

CO3 To apply marketing mix for various types of events and analyse the various sponsorship requirements for an event.

CO4 To analyse the various event operations requirements for the conduct of an event.

CO5 To evaluate the various risk and safety issues associated with event industry.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	2	1	1	1	1	3	3	2	1
CO2	3	2	2	1	1	1	1	3	3	2	1
CO3	3	2	2	1	1	1	1	3	3	2	1
CO4	3	2	2	1	1	1	1	3	3	2	1
CO5	3	2	2	1	1	1	1	3	3	2	1

MB1214 SUSTAINABILITY MANAGEMENT L T P C
3 0 0 3

OBJECTIVES

- To providestudentswithfundamentalknowledgeofthenotionofcorporatesustainabily.
- To determine how organizations impacts on the environment and socio technical systems, the relationship between social and environmental performance and competitiveness, the approaches and methods.

UNIT I MANAGEMENT OF SUSTAINABILITY 9

Management of sustainability -rationale and political trends: An introduction to sustainability management, International and European policies on sustainable development, theoretical pillars in sustainability management studies. **CO1**

UNIT II CORPORATE SUSTAINABILITY AND RESPONSIBILITY 9

Corporate sustainability perimeter, corporate sustainability institutional framework, integration of **CO2**

sustainability into strategic planning and regular business practices, fundamentals of stakeholder engagement.

UNIT III SUSTAINABILITY MANAGEMENT: STRATEGIES AND APPROACHES **10**

Corporate sustainability management and competitiveness: Sustainability-oriented corporate strategies, markets and competitiveness, Green Management between theory and practice, Sustainable Consumption and Green Marketing strategies, Environmental regulation and strategic postures; Green Management approaches and tools; Green engineering: clean technologies and innovation processes; Sustainable Supply Chain Management and Procurement. **CO3**

UNIT IV SUSTAINABILITY AND INNOVATION **8**

Socio technical transitions and sustainability, Sustainable entrepreneurship, Sustainable pioneers in green market niches, Smart communities and smart specializations. **CO4**

UNIT V SUSTAINABLE MANAGEMENT OF RESOURCES, COMMODITIES AND COMMONS **9**

Energy management, Water management, Waste management. **CO5**

TOTAL : 45 PERIODS

TEXT BOOKS

1. Daddi, T., Iraldo, F., Testa, Environmental Certification for Organizations and Products: Management, 2015
2. Christian N.Madu, Handbook of Sustainability Management 2012
3. Petra Molthan-Hill, The Business Student's Guide to Sustainable Management: Principles and Practice, 2014.

REFERENCE BOOKS

1.Margaret Robertson, Sustainability Principles and Practice, 2014

2.Peter Rogers**,** An Introduction to Sustainable Development, 2006

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To understand sustainability management as an approach to aid in evaluating and minimizing environmental impacts while achieving the expected social impact

CO2 To apply sustainability into strategic planning and regular business practices

CO3 To apply and evaluate sustainability management strategies

CO4 Knowledge of innovative practices in sustainable business and community management

CO5 Deep understanding of sustainable management of resources and commodities

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	3	2	2	1	-	-	-	3	3	2	-
CO2	3	2	2	1	-	-	-	3	3	2	-
CO3	3	2	2	1	-	-	-	3	3	2	-
CO4	3	2	2	1	-	-	-	3	3	2	-
CO5	3	2	2	1	-	-	-	3	3	2	-

AUDIT COURSES

AX1001	ENGLISH FOR RESEARCH PAPER WRITING	L	T	P	C
		2	0	0	0

OBJECTIVES

- Teach how to improve writing skills and level of reading ability
- Tell about what to write in each section
- Summarise the skills needed when writing a Title
- Infer the skills needed when writing the Conclusion
- Ensure the quality of paper at very first-time submission

UNIT I INTRODUCTIONTORESEARCHPAPERWRITING **6**

Planning and Preparation, Word Order, Breaking up long sentences, Structuring Paragraphs and Sentences, Being Concise and Removing Redundancy, Avoiding Ambiguity and Vagueness **CO1**

UNIT II PRESENTATIONSKILLS **6**

Clarifying Who Did What, Highlighting Your Findings, Hedging and Criticizing, Paraphrasing and Plagiarism, Sections of a Paper, Abstracts, Introduction **CO2**

UNIT III TITLE WRITING SKILLS **6**

Key skills are needed when writing a Title, key skills are needed when writing an Abstract, key skills are needed when writing an Introduction, skills needed when writing a Review of the Literature, Methods, Results, Discussion, Conclusions, The Final Check **CO3**

UNIT IV RESULT WRITINGSKILLS **6**

Skills are needed when writing the Methods, skills needed when writing the Results, skills are needed when writing the Discussion, skills are needed when writing the Conclusions **CO4**

UNIT V VERIFICATIONSKILLS **6**

Useful phrases, checking Plagiarism, how to ensure paper is as good as it could possibly be the first-time submission **CO5**

TOTAL : 30 PERIODS

TEXT BOOKS

1. Adrian Wall work, English for Writing Research Papers, Springer New York Dordrecht Heidelberg London,2011
2. Day R How to Write and Publish a Scientific Paper, CambridgeUniversityPress2006

REFERENCE BOOKS

1. Gold bort R Writing for Science, Yale University Press (available on Google Books)2006
2. High man N, Handbook of Writing for the Mathematical Sciences, SIAM. High man's book 1998.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 Understand how to improve writing skills and level of reading ability
CO2 Learn about what to write in each section
CO3 Understand the skills needed when writing a Title
CO4 Understand the skills needed when writing the Conclusion
CO5 Ensure the good quality of paper at very first-time submission

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	-	1	-	1	-	-	-	1	1	-	-
CO2	-	1	-	1	-	-	-	1	1	-	-
CO3	-	1	-	1	-	-	-	1	1	-	-
CO4	-	1	-	1	-	-	-	1	1	-	-
CO5	-	1	-	1	-	-	-	1	1	-	-

AX1002 DISASTER MANAGEMENT

L	P	T	C
2	0	0	0

OBJECTIVES

- Summarize basics of disaster
- Explain a critical understanding of key concepts in disaster risk reduction and humanitarian response.
- Illustrate disaster risk reduction and humanitarian response policy and practice from multiple perspectives.
- Describe an understanding of standards of humanitarian response and practical relevance in specific types of disasters and conflict situations.
- Develop the strengths and weaknesses of disaster management approaches

UNIT I INTRODUCTION **6**

Disaster: Definition, Factors and Significance; Difference between Hazard And Disaster; Natural and Manmade Disasters: Difference, Nature, Types and Magnitude **CO1**

UNIT II REPERCUSSIONS OF DISASTERS AND HAZARDS **6**

Economic Damage, Loss of Human and Animal Life, Destruction Of Ecosystem. Natural Disasters: Earthquakes, Volcanisms, Cyclones, Tsunamis, Floods, Droughts And Famines, Landslides And Avalanches, Man-made disaster: Nuclear Reactor Meltdown, Industrial Accidents, Oil Slicks And Spills, Outbreaks Of Disease And Epidemics, War And Conflicts. **CO2**

UNIT III DISASTER PRONE AREAS IN INDIA **6**

Study of Seismic Zones; Areas Prone To Floods and Droughts, Landslides And Avalanches; Areas Prone To Cyclonic and Coastal Hazards with Special Reference To Tsunami; Post-Disaster Diseases and Epidemics **CO3**

UNIT IV DISASTER PREPAREDNESS AND MANAGEMENT **6**

Preparedness: Monitoring Of Phenomena Triggering a Disaster or Hazard; Evaluation of Risk: Application of Remote Sensing, Data from Meteorological And Other Agencies, Media Reports: Governmental and Community Preparedness. **CO4**

UNIT V RISK ASSESSMENT **6**

Disaster Risk: Concept and Elements, Disaster Risk Reduction, Global and National Disaster Risk Situation. Techniques of Risk Assessment, Global Co-Operation in Risk Assessment and Warning, People's Participation in Risk Assessment. Strategies for Survival **CO5**

TOTAL : 30 PERIODS

TEXT BOOKS

s

1. Goel S. L., Disaster Administration And Management Text And Case Studies",Deep & Deep Publication Pvt. Ltd., New Delhi,2009.

REFERENCE BOOKS

1. Nishitha Rai, Singh AK, "Disaster Management in India: Perspectives, issues and strategies "'NewRoyal book Company, 2007.
2. Sahni, Pardeep .A. ," Disaster Mitigation Experiences And Reflections", Prentice Hall Of India, New Delhi,2001.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 Ability to summarize basics of disaster

CO2 Abilitytoexplaincriticalunderstandingofkeyconceptsindisasterriskreductionandhumanitarianresponse.

CO3 Ability to illustrate disaster risk reduction and humanitarian response policy and practice from multiple perspectives.

CO4 Ability to describe understanding of standards of humanitarian response and practical relevance in specific types of disasters and conflict situations.

CO5 Abilitytodevelopthestrengthsandweaknessesofdisastermanagementapproaches

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 1	PSO2	PSO3
CO1	-	1	-	1	-	-	-	1	1	-	-
CO2	-	1	-	1	-	-	-	1	1	-	-
CO3	-	1	-	1	-	-	-	1	1	-	-
CO4	-	1	-	1	-	-	-	1	1	-	-
CO5	-	1	-	1	-	-	-	1	1	-	-

AX1003 VALUE EDUCATION

L	T	P	C
2	0	0	0

OBJECTIVES

- Understand value of education and self-development
- Imbibe good moral and social values
- Understand the importance of character

UNIT I **6**

Values and self-development–Social values and individual attitudes. Work ethics, Indian vision of humanism. Moral and non-moral valuation. Standards and principles. Value judgements **CO1**

UNIT II **6**

Importance of cultivation of values. Sense of duty. Devotion, Self-reliance. Confidence, Concentration. Truthfulness, Cleanliness. Honesty, Humanity. Power of faith, National Unity. Patriotism. Love for nature, Discipline **CO2**

UNIT III **6**

Personality and Behavior Development-Soul and Scientific attitude. Positive Thinking. Integrity and discipline. Punctuality, Love and Kindness. Avoid fault Thinking. Free fro manger, Dignity of labour. **CO3**

UNIT IV **6**

Universal brother hood and religious tolerance. True friendship. Happiness Vs suffering, love for truth. Aware of self-destructive habits. Association and Cooperation. Doing best for saving nature **CO4**

UNIT V **6**

Character and Competence–Holy books vs Blind faith. Self-management and Good health. Science of reincarnation. Equality, Nonviolence, Humility, Role of Women. All religions and same message. Mind your Mind, Self-control. Honesty, Studying effectively. **CO5**

TOTAL : 30 PERIODS

TEXT BOOKS

1. N. Venkataiah Value Education APH Publishing, 1998

REFERENCE BOOKS

1. Chakroborty,S.K."ValuesandEthicsfororganizationsTheoryandpractice",Oxford University Press, New Delhi

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 Understand the importance of self-development
CO2 Learn the importance of Human values
CO3 Develop the overall personality
CO4 Imbibe good values
CO5 Develop the concentration skill by understanding mind control strategies

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 1	PSO2	PSO3
CO1	-	-	-	-	-	-	1	1	-	-	1
CO2	-	-	-	-	-	-	1	1	-	-	1
CO3	-	-	-	-	-	-	1	1	-	-	1
CO4	-	-	-	-	-	-	1	1	-	-	1
CO5	-	-	-	-	-	-	1	1	-	-	1

AX1004 **CONSTITUTION OF INDIA** **L T P C**
2 0 0 0

OBJECTIVES

Students will be able to:

- Understand the premises informing the twin themes of liberty and freedom from a civil rights perspective.
- To address the growth of Indian opinion regarding modern Indian intellectuals' constitutional
- Role and entitlement to civil and economic rights as well as the emergence nationhood in the early years of Indian nationalism.
- To address the role of socialism in India after the commencement of the Bolshevik Revolution in 1917 and its impact on the initial drafting of the Indian Constitution.

UNIT I HISTORY OF MAKING OF THE INDIAN CONSTITUTION **6**

History, Drafting Committee,(Composition Working), Preamble, Salient features **CO1**

UNIT II CONTOURSOFCONSTITUTIONALRIGHTSANDDUTIES **6**

Fundamental Rights, Right to Equality, Right to Freedom, Right against Exploitation, Right to Freedom of Religion, Cultural and Educational Rights, Right to Constitutional Remedies, Directive Principles of State Policy, Fundamental Duties. **CO2**

UNIT III ORGANS OF GOVERNANCE **6**

Parliament, Composition, Qualifications and Disqualifications, Powers and Functions, Executive, President, Governor, Council of Ministers, Judiciary, Appointment and Transfer of Judges, Qualifications, Powers and Functions. **CO3**

UNIT IV LOCAL ADMINISTRATION **6**

District's Administration head: Role and Importance, Municipalities: Introduction, Mayor and role of Elected Representative, CEO, Municipal Corporation. Panchayati raj: Introduction, PRI: Zila Panchayat. Elected officials and their roles, CEO Zila Panchayat: Position and role. Block level: Organizational Hierarchy (Different departments), Village level: Role of Elected and Appointed officials, Importance of grass root democracy. **CO4**

UNIT V ELECTION COMMISSION **6**

Election Commission: Role and Functioning. Chief Election Commissioner and Election Commissioners- Institute and Bodies for the welfare of SC/ST/OB Candwomen. **CO5**

TOTAL : 30 PERIODS

TEXT BOOKS

1. The Constitution of India,1950 (Bare Act),Government Publication.
2. Dr.S.N.Busi, Dr.B. R.Ambedkar framing of Indian Constitution 1stEdition,2015.

REFERENCE BOOKS

1. M.P.Jain, Indian Constitution Law, 7th Edn., LexisNexis, 2014.
2. D.D.Basu, Introduction to the Constitution India, Lexis Nexis, 2015.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 Discuss the growth of the demand for civil rights in India for the bulk of Indian before the arrival of Gandhi in Indian politics.

CO2 Discuss the intellectual origins of the frame work of argument that in formed the conceptualization of social reforms leading to revolution in India.

CO3 Discuss the circumstances surrounding the foundation of the Congress Socialist Party [CSP] under the leadership of Jawaharlal Nehru and the eventual failure of the proposal of direct elections through adult suffrage in the Indian Constitution.

CO4 DiscussthepassageoftheHinduCodeBillof1956.

CO5 Discuss the role of Election Commission and institutions for welfare of women.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 1	PSO2	PSO3
CO1	-	-	-	-	-	-	-	1	1	-	-
CO2	-	-	-	-	-	-	-	1	1	-	-
CO3	-	-	-	-	-	-	-	1	1	-	-
CO4	-	-	-	-	-	-	-	1	1	-	-
CO5	-	-	-	-	-	-	-	1	1	-	-

AX1006 **STRESS MANAGEMENT BY YOGA** **L T P C**
2 0 0 0

OBJECTIVES

- To achieve overall health of body and mind
- To overcome stress

UNIT I STRESS MANAGEMENT **6**

Meaning of stress – body reaction to stress-sources of stress-problem solving and time management. **CO1**

UNIT II STRESS MASNAGEMENT PRACTICES **6**

Psychological and Spiritual Relaxation Methods- Physical Methods of Stress Reduction - Preparing for the Future: College and Occupational Stress. **CO2**

UNIT III YOGA PRACTICES **6**

Definitions of Eight parts of yoga.(Ashtanga). **CO3**

UNIT IV DO'S AND DON'T'S IN YOGA PRACTICES **6**

Yam and Niyam - Do`s and Don't's in life - i) Ahimsa, satya, astheya, bramhacharya and aparigraha. **CO4**

UNIT V PRANAYAM PRACTICES **6**

Asan and Pranayam - Various yog poses and their benefits for mind & body - Regularization of breathingtechniquesand its effects-Types of pranayam **CO5**

TOTAL : 30 PERIODS

TEXT BOOKS

1. Yogic Asanas for Group Training - Part- I": Janardan Swami Yogabhyasi Mandal, Nagpur
2. Stress Management Paperback – 1 January 2016 by Pratibha Goyal Alok Chakrawal, Studera Press.

REFERENCE BOOKS

1. "Raja yoga or conquering the Internal Nature" by Swami Vivekananda, Advaita Ashrama (Publication Department), Kolkata.

COURSE OUTCOMES

Upon completion of the course, students will be able to

CO1 To create awareness about stress and its outcome
CO2 To understand the various stress management practices
CO3 To develop healthy mind in a healthy body thus improving socialhealth also
CO4 To educate the importance of various asanas
CO5 To Improve efficiency in breathing practices

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 1	PSO2	PSO3
CO1	-	-	-	-	-	-	-	1	1	-	-
CO2	-	-	-	-	-	-	-	1	1	-	-
CO3	-	-	-	-	-	-	-	1	1	-	-
CO4	-	-	-	-	-	-	-	1	1	-	-
CO5	-	-	-	-	-	-	-	1	1	-	-

OPEN ELECTIVES

(Offered To Other Department)

OMB101	TOTAL QUALITY MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To facilitate the understanding of Quality Management principles and process.

UNIT I: INTRODUCTION **9**

Introduction - Need for quality - Evolution of quality - Definitions of quality- Dimensions of product and service quality - Basic concepts of TQM - TQM Framework – Contributions of Deming, Juran and Crosby - Barriers to TQM - Customer focus - Customer orientation, Customer satisfaction, Customer complaints, customer retention. **CO1**

UNIT II: TQM PRINCIPLES **9**

Leadership - Quality Statements, Strategic quality planning, Quality Councils – Employee involvement - Motivation, Empowerment, Team and Teamwork, Recognition and Reward, Performance appraisal - Continuous process improvement –PDCA cycle, 5S,Kaizen-Supplierpartnership-Partnering, Supplier selection, Supplier Rating. **CO2**

UNIT III: TQM TOOLS AND TECHNIQUES I **9**

The seven traditional tools of quality- New management tools - Six sigma: Concepts, Methodology, applications to manufacturing, service sector including IT - Bench marking – Reason to benchmark, Bench marking process- FMEA - Stages, Types. **CO3**

UNIT IV: TQM TOOLS AND TECHNIQUES II **9**

Quality Circles - Cost of Quality - Quality Function Deployment (QFD) - Taguchi quality loss function -TPM-Concepts, improvement needs-Performance measures. **CO4**

UNIT V: QUALITY MANAGEMENT SYSTEM **9**

Introduction—Benefits of ISO Registration — ISO 9000 Series of Standards—Sector-Specific Standards — AS9100, TS 16949 and TL9000—ISO 9001 Requirements — Implementation — Documentation — Internal Audits — Registration— ENVIRONMENTAL MANAGEMENT SYSTEM: Introduction — ISO 14000 Series Standards — Concepts of ISO 14001— Requirements of ISO14001—Benefits of EMS. **CO5**

TOTAL PERIODS: 45

TEXT BOOKS:

Dale H. Besterfiled, CarolB. Michna, Glen H. Besterfield, Mary B. Sacre, Hemant Urdhwareshe and Rashmi Urdhwareshe, “Total Quality Management”, Pearson Education Asia, Revised Third Edition, Indian Reprint, Sixth Impression, 2013.

REFERENCES:

1. James R. Evans and William M. Lindsay, "The Management and Control of Quality",8th Edition, First Indian Edition, CengageLearning,2012.
2. Janakiraman. Band Gopal.R.K., "Total Quality Management – Text and Cases", Prentice Hall (India) Pvt. Ltd., 2006.
3. Suganthi.L and Anand Samuel, "Total Quality Management", Prentice Hall (India) Pvt.Ltd., 2006.
4. ISO 9001-2015standards

COURSE OUTCOMES

Upon completion of the course, the students will be able

CO1	The students can understand the principles of quality management and to explain how these principles can be applied within quality management systems.
CO2	Students can identify the key aspects of the quality improvement cycle and to select and use appropriate tools and techniques for controlling, improving and measuring quality.
CO3	Students can understand the organisational, communication and teamwork requirements for effective quality management
CO4	Critically analyse the strategic issues in quality management, including current issues and developments, and to devise and evaluate quality implementation plans
CO5	The student would be able to apply the tools and techniques of quality management to manufacturing and services processes.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 1	PSO2	PSO3
CO1	3	-	3	-	-	-	-	1	3	1	-
CO2	3	-	3	-	-	-	-	1	3	1	-
CO3	3	-	3	-	-	-	-	1	3	1	-
CO4	3	-	3	-	-	-	-	1	3	1	-
CO5	3	-	3	-	-	-	-	1	3	1	-

OMB102 LOGISTICS AND SUPPLY CHAIN MANAGEMENT L T P C
3 2 0 4

OBJECTIVES:

- To provide an insight on the fundamentals of supply chain networks, tools and techniques.

UNIT I: INTRODUCTION 9

Role of Logistics and Supply chain Management: Scope and Importance- Evolution of Supply Chain - Decision Phases in Supply Chain - Supply chain and competitive Strategies – Drivers of Supply Chain Performance and Obstacles. **CO1**

UNIT II: SOURCING AND NETWORK DESIGN 9

Role of sourcing supply chain - Outsourcing – Make Vs buy -Sourcing strategy - Supplier Selection and Contract Negotiation. Building strategic partnerships and trust within a supply chain - Role of Distribution in Supply Chain – Factors influencing Distribution network design – Design options for Distribution Network Distribution Network in Practice-Role of network Design in Supply Chain – Framework for network Decisions. **CO2**

UNIT III: LOGISTICS IN SUPPLY CHAIN 9

Introduction to logistics – Role of logistics in Competitive strategy– Value added logistics services – Role of transportation in supply chain – factors affecting transportations decision – Design option for transportation network – Tailored transportation – Routing and scheduling in transportation **CO3**

UNIT IV: TRANSPORTATON AND PACKAGING

Transportation System – Evolution, Infrastructure and Networks. Freight Management– Containerization; Modal Characteristics - Inter-modal Operators and Transport Economies; International Logistics-objectives, importance in global economy, Characteristics of global supply chains; Packaging - Design considerations – Logistics outsourcing. **CO4**

UNIT V: IT IN SUPPLY CHAIN **9**

The role IT in supply chain- Supply Chain Integration – Agile Supply chain – Green Supply chain – Reverse Supply chain – E-logistics – future of IT in supply chain – E-Business in supply chain – Supply chain analytics - Blockchain **CO5**

TOTAL PERIODS: 45

TEXT BOOKS:

1. Sunil Chopra, Peter Meindl and Kalra, "Supply Chain Management, Strategy, Planning, and Operation", Pearson Education, 2010.

REFERENCES:

1. Jeremy F.Shapiro, "Modeling the Supply Chain", Thomson Duxbury, 2002.
2. Srinivasan G.S, "Quantitative models in Operations and Supply Chain Management, PHI, 2010
3. David J.Bloomberg , Stephen Lemay and Joe B.Hanna, "Logistics", PHI 2002.
4. James B.Ayers, "Handbook of Supply Chain Management", St.Lucle press, 2000.

COURSE OUTCOMES

Upon completion of the course, the students will be able

CO1 To understand the basics of Supply chain, the strategic role of SCM and the drivers of supply chain performance.

CO2 To understand the different distribution networks in Supply chain, the factors influencing design of these networks and to develop a framework of network for distribution.

CO3 To understand about the logistic part of supply chain management and the methods to identify the optimized route for transportation.

CO4 To understand about sourcing, selection of suppliers and supply chain coordination

CO5 To understand the role of IT in Supply chain management.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 1	PSO2	PSO3
CO1	2	2	2	2	2	-	2	2	3	1	-
CO2	2	2	2	2	2	-	2	2	3	1	-
CO3	2	2	2	2	2	-	2	2	3	1	-
CO4	2	2	2	2	2	-	2	2	3	1	-
CO5	2	2	2	2	2	-	2	2	3	1	-

OMB103	COST MANAGEMENT OF ENGINEERING PROJECTS	L	T	P	C
		3	0	0	3

Objectives

- Summarize the costing concepts and their role in decision making
- Infer the project management concepts and their various aspects in selection
- Interpret costing concepts with project execution
- Develop knowledge of costing techniques in service sector and various budgetary control techniques
- Illustrate with quantitative techniques in cost management

UNIT – I INTRODUCTION TO COSTING CONCEPTS **9**

Objectives of a Costing System; Cost concepts in decision–making; Relevant cost, Differential cost, Incremental cost and Opportunity cost; Creation of a Database for operational control. CO1

UNIT – II INTRODUCTION TO PROJECT MANAGEMENT **9**

Project: meaning, Different types, why to manage, cost overruns centres, various stages of project execution: conception to commissioning. Project execution as conglomeration of technical and nontechnical activities, Detailed Engineering activities, Pre project execution main clearances and documents, Project team: Role of each member, Importance Project site: Data required with significance, Project contracts. CO2

UNIT – III PROJECT EXECUTION AND COSTING CONCEPTS **9**

Project execution Project cost control, Bar charts and Network diagram, Project commissioning: mechanical and process, Cost Behavior and Profit Planning Marginal Costing; Distinction between Marginal Costing and Absorption Costing; Break–even Analysis, Cost–Volume–Profit Analysis, Various decision–making problems, Pricing strategies: Pareto Analysis, Target costing, Life Cycle Costing. CO3

UNIT – IV COSTING OF SERVICE SECTOR AND BUDGETERY CONTROL **9**

Just–in–time approach, Material Requirement Planning, Enterprise Resource Planning, Activity– Based Cost Management, Bench Marking; Balanced Score Card and Value–Chain Analysis, Budgetary Control: Flexible Budgets; Performance budgets; Zero–based budgets. CO4

UNIT – V QUANTITATIVE TECHNIQUES FOR COST MANAGEMENT **9**

Linear Programming, PERT/CPM, Transportation problems, Assignment problems, Learning Curve Theory. CO5

Total Periods: 45

Reference Books:

1. Ashish K. Bhattacharya, 'Principles & Practices of Cost Accounting' A. H. Wheeler publisher, 1991.
2. Charles T. Horngren and George Foster, 'Advanced Management Accounting', Pearson Prentice Hall, 1988.
3. Charles T. Horngren et. Al. 'Cost Accounting A Managerial Emphasis', Prentice Hall of India, New Delhi, 2011.
4. Robert S Kaplan and Anthony A. Alkinson, 'Management & Cost Accounting', Pearson Prentice Hall, 2003.
5. N. D. Vohra, 'Quantitative Techniques in Management', Tata McGraw Hill Book Co. Ltd, 2007.

Course Outcomes (CO)

CO1 Understand the costing concepts and their role in decision making
CO2 Understand the project management concepts and their various aspects in selection
CO3 Interpret costing concepts with project execution
CO4 Gain knowledge of costing techniques in service sector and various budgetary control techniques
CO5 Become familiar with quantitative techniques in cost management

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 1	PSO2	PSO3
CO1	2	2	2	2	-	-	-	2	3	1	-
CO2	2	2	2	2	-	-	-	2	3	1	-
CO3	2	2	2	2	-	-	-	2	3	1	-
CO4	2	2	2	2	-	-	-	2	3	1	-
CO5	2	2	2	2	-	-	-	2	3	1	-

PROFESSIONAL ELECTIVES
(Offered to Other Departments)

MG1001 PRINCIPLES OF MANAGEMENT **L T P C**
3 0 0 3

Objectives

- To enable the students to study the evolution of Management.
- To study the functions and principles of management.
- To learn the application of the principles in an organization.
- To acquire the skills of effective leadership and communication.
- To gain the knowledge of tools and techniques for an effective managerial skill.

UNIT – I INTRODUCTION TO MANAGEMENT AND ORGANIZATIONS **9**

Definition of Management – Science or Art – Manager Vs Entrepreneur – Types of managers – managerial roles and skills – Evolution of Management – Scientific, human relations, system and contingency approaches – Types of Business organization – Sole proprietorship, partnership, company – Public and private sector enterprises – Organization culture and Environment – Current trends and issues in Management. CO1

UNIT – II PLANNING **9**

Nature and purpose of planning – Planning process – Types of planning – Objectives – Setting objectives – Policies – Planning premises – Strategic Management – Planning Tools and Techniques – Decision making steps and process. CO2

UNIT – III ORGANISING **9**

Nature and purpose – Formal and informal organization – Organization chart – Organization structure – Types – Line and staff authority – Departmentalization – CO3

Delegation of authority – Centralization and decentralization – Job Design – Human Resource Management – HR Planning, Recruitment, selection, Training and Development, Performance Management, Career planning and management.

UNIT – IV DIRECTING **9**

Foundations of individual and group behaviour – Motivation – Motivation theories – Motivational techniques – Job satisfaction – Job enrichment – Leadership – Types and theories of leadership – Communication – Process of communication – Barrier in communication – Effective communication – Communication and IT. CO4

UNIT – V CONTROLLING **9**

System and process of controlling – Budgetary and non–budgetary control techniques – Use of computers and IT in Management control – Productivity problems and management – Control and performance – Direct and preventive control – Reporting. CO5

Total Periods: 45

Text Books:

1. JAF Stoner, Freeman R.E and Daniel R Gilbert "Management", 6th Edition, Pearson Education, 2004.
2. Stephen P. Robbins & Mary Coulter, "Management", Prentice Hall (India), Pvt. Ltd., 15th Edition, 2020.

Reference Books:

1. Harold Koontz & Heinz Weihrich, "Essentials of Management", Tata McGraw Hill, 10th Edition, 2015.
2. Robert Kreitner & Mamata Mohapatra, "Management", Biztantra, 2008.
3. Stephen A. Robbins & David A. Decenzo & Mary Coulter, "Fundamentals of Management", 11th Edition, Pearson Education, 2017.
4. Tripathy PC & Reddy PN, "Principles of Management", Tata Mcgraw Hill, 6th Edition 2017.

Course Outcomes (CO)

CO1 Ability to understand the various terms and definitions related to management and organization.

CO2 Ability to acquire the skill of planning and various strategies of management in an organization.

CO3 Ability to understand the types of organization and also get an insight into HR planning, recruitment, selection and career planning and management.

CO4 Ability to acquire the skills of leadership and understand the importance of communication to run an organization effectively.

CO5 Ability to understand the concept of budget and budgetary control and acquire the skill of controlling technique.

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	2	2	-	-	-	2	3	1	-
CO2	2	2	2	2	-	-	-	2	3	1	-

CO3	2	2	2	2	-	-	-	2	3	1	-
CO4	2	2	2	2	-	-	-	2	3	1	-
CO5	2	2	2	2	-	-	-	2	3	1	-

MG1002 **OPERATIONS RESEARCH** **L T P C**
3 0 0 3

Objectives

- To classify and formulate real-life problem for modelling, solving and applying for decision making.
- To study the formulation and various methods of solutions for linear programming, transportation, assignment , CPM and PERT problems
- To solve problems using dynamic programming method

UNIT – I LINEAR MODELS **9**

Introduction to operations research-Linear programming problems (LPP)-Graphical method-Simplex method-Big M Method-Dual simplex method-Primal Dual problems - Dual theory and Sensitivity analysis CO1

UNIT – II TRANSPORTATION MODELS **9**

Transportation and assignment problems-Applications (Emphasis should be more on problems than theory) CO2

UNIT – III NETWORK MODELS **9**

Shortest path problem: Dijkstra's algorithms, Floyd's algorithm, systematic method – CPM / PERT–Network diagram-Events and activities-Project Planning-Reducing critical events and activities-Critical path calculations-example-Sequencing problems. CO3

UNIT – IV DECISION MODELS AND INVENTORY MODELS **9**

Replacement problems-Capital equipment-Discounting costs-Group replacement. Inventory models-various costs- Deterministic inventory models-Economic lot size-Stochastic inventory models-Single period inventory models with shortage cost. CO4

UNIT – V QUEUING MODELS **9**

Characteristics of Queuing Models – Single and multi server models -Poisson Queues - (M / M / 1) : (FIFO / ∞ /∞), (M / M / 1) : (FIFO / N / ∞), (M / M / C) : (FIFO / ∞ / ∞), (M / M / C) : (FIFO / N / ∞) models. CO5

Total Periods: 45

Text Books:

1. H. A. Taha, operational research-An introduction, Macmillan, 1976
2. F. S. Hiller and G. J. Liebermann, Introduction to operational research (7th edition)
3. B. E. Gillet, Introduction to operational research-A computer oriented algorithmic approach, McGraw Hill, 1989
4. H. M. Wagner, Principles of operational research with applications to managerial decisions, PH, Inc, 1975

Reference Books:

1. Bazara M.J., Jarvis and Sherali H., "Linear Programming and Network Flows", John Wiley,

2009.
2. Budnick F.S., “Principles of Operations Research for Management”, Richard D Irwin, 1990.
3. Philip D.T. and Ravindran A., “Operations Research”, John Wiley, 1992.
4. Shennoy G.V. and Srivastava U.K., “Operation Research for Management”, Wiley Eastern, 1994.
5. Tulsian and Pasdey V., “Quantitative Techniques”, Pearson Asia, 2002.
6. J. C. Pant, ‘Introduction to Optimisation: Operations Research’, Jain Brothers, Delhi, 2008.
7. Pannerselvam, ‘Operations Research’, Prentice Hall of India 2010.

Course Outcomes (CO)

CO1 To analyze the problems in engineering, management or business environment, focusing on important details
CO2 To formulate real problems in terms of input-output parameters relationships and identify the solution procedure
CO3 To understand the concept of network and project planning
CO4 To understand the inventory management in manufacturing context
CO5 To understand the application of queuing theory in real world

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	2	2	-	-	2	2	3	1	-
CO2	2	2	2	2	-	-	2	2	3	1	-
CO3	2	2	2	2	-	-	2	2	3	1	-
CO4	2	2	2	2	-	-	2	2	3	1	-
CO5	2	2	2	2	-	-	2	2	3	1	-

MG 1003 APPLIED OPERATIONS RESEARCH **L T P C**
3 0 0 3

OBJECTIVES:

- To provide the concept and an understanding of basic concepts in Operations Research Techniques for Analysis and Modeling in Computer Applications.
- To understand , develop and solve mathematical model of linear programming problems
- To understand , develop and solve mathematical model of Transport and assignment problems
- To Understand network modeling for planning and scheduling the project activities.

UNIT I LINEAR PROGRAMMING MODELS **9**

Mathematical Formulation - Graphical Solution of linear programming models – Simplex method – Artificial variable Techniques.

UNIT II TRANSPORTATION AND ASSIGNMENT MODELS **9**

Mathematical formulation of transportation problem- Methods for finding initial basic feasible solution – optimum solution - degeneracy –Mathematical formulation of assignment models – Hungarian Algorithm.

UNIT III INVENTORY MODELS **9**

Inventory Models – Economic order Quantity Models- Quantity Discount Models- Stochastic Inventory Models- Multi Product Model- Inventory Control Models in Practice

UNIT IV SCHEDULING FOR PROJECT ACTIVITIES 9

Network Construction – Critical Path Method – Project Evaluation and Review Technique – Resource Analysis in Network Scheduling

UNIT V QUEUEING MODELS 9

Characteristics of Queuing Models – Single and multi server models
Poisson Queues - (M / M / 1) : (FIFO / ∞ /∞), (M / M / 1) : (FIFO / N / ∞), (M / M / C) : (FIFO / ∞ / ∞), (M / M / C) : (FIFO / N / ∞) models.

TOTAL : 45 PERIODS

Text Books:

1. H. A. Taha, operational research-An introduction, Macmillan, 1976
2. F. S. Hiller and G. J. Liebermann, Introduction to operational research (7th edition)
3. B. E. Gillet, Introduction to operational research-A computer oriented algorithmic approach, McGraw Hill, 1989
4. H. M. Wagner, Principles of operational research with applications to managerial decisions, PH, Inc, 1975

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2. Budnick F.S., "Principles of Operations Research for Management", Richard D Irwin, 1990.
3. Philip D.T. and Ravindran A., "Operations Research", John Wiley, 1992.
4. Shennoy G.V. and Srivastava U.K., "Operation Research for Management", Wiley Eastern, 1994.
5. Tulsian and Pasdey V., "Quantitative Techniques", Pearson Asia, 2002.
6. J. C. Pant, 'Introduction to Optimisation: Operations Research', Jain Brothers, Delhi, 2008.
7. Pannerselvam, 'Operations Research', Prentice Hall of India 2010.

Course Outcomes (CO)

CO1 To analyze the problems in engineering, management or business environment, focusing on important details
CO2 To understand the transportation and assignment in logistics and job allocation scenarios
CO3 To understand the inventory management in manufacturing context
CO4 To understand the concept of network and project planning
CO5 To understand the applications of queuing theory in real world

MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)								PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO1	2	2	2	2	-	-	2	2	3	1	-
CO2	2	2	2	2	-	-	2	2	3	1	-
CO3	2	2	2	2	-	-	2	2	3	1	-
CO4	2	2	2	2	-	-	2	2	3	1	-
CO5	2	2	2	2	-	-	2	2	3	1	-