



St. JOSEPH'S COLLEGE OF ENGINEERING

(An Autonomous Institution)

St. Joseph's Group of Institutions
Jeppiaar Educational Trust

OMR, Chennai - 119.

AUTONOMOUS CURRICULUM AND SYLLABUS 2021



You Choose, We Do It

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FACULTY OF MANAGEMENT SCIENCES MASTER OF BUSINESS ADMINISTRATION (2YEARS) REGULATIONS – 2021 CHOICE BASED CREDIT SYSTEM

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

MBA programme curriculum is designed to prepare the post graduate students

- I. To have a thorough understanding of the core aspects of the business.
- II. To provide the learners with the management tools to identify, analyze and create business opportunities as well as solve business problems.
- III. To prepare them to have a holistic approach towards management functions.
- IV. To 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
	Statistics for Management	V	V	√	V				
	Management Concepts and	√	√	√	√	√	√		
			·			, v	, v	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
		√	V	√	√				
	Accounting for Decision Making	√	$\sqrt{}$	√	√				1
I	Legal Aspects of Business								√
	Information Management					√			√
	Research Methodology and IPR								
	(Ethics Seminar)	√		V	√	√		√	√
	Business Communications (Laboratory)	√			√	√	√		
	Quantitative Techniques for Decision Making	√		√					
	Financial Management	V	V	√	√				
	Human Resource Management	√	√	√	√	√	√	√	
	Operations Management	V	V	√	√			V	1
	Management Concepts and Organizational Behavior Managerial Economics Accounting for Decision Makin Legal Aspects of Business Information Management Research Methodology and IPF Indian Ethos and Business (Ethics Seminar) Business Communications (Laboratory) Quantitative Techniques for Decision Making Financial Management Human Resource Management	√	√	√	√	√	√	√	1
	Management Concepts and Organizational Behavior Managerial Economics Accounting for Decision Makit Legal Aspects of Business Information Management Research Methodology and IPI 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 Data Analysis and Business Modelling (Laboratory) Strategic Management International Business Creativity and Innovation Laboratory Elective I	1		1	1	1	1	1	1
	Non-Functional Elective	Business							
		√	√	√	√				√
		<u> </u>	I		<u> </u>	<u> </u>	<u> </u>	<u> </u>	I
	Strategic Management	V	V	V	V	√	V	V	
		V	V	√	V	√	V	V	V
			√	√	√	√	√		√
	Elective I			*l.	<u>-</u>	om o = = - 1	4ak1-		
	Elective II	1		^ sno	wn in s	eparate	table		

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

MAPPING OF NON-FUNCTIONAL ELECTIVES WITH PO'S

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

MAPPING OF FUNCTIONAL ELECTIVES WITH POS

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

	Human 1	Resour	ce Ma	nagem	ent						
1	Strategic Human Resource	V	V	1 1	V			V	V		
1	Management	٧	V	V	V			V	٧		
2	Industrial Relations and Labour Welfare	√	√	√	√			√	√		
3	Social Psychology	1	V	1	V	V	V	1	V		
4	Organizational, Design, Change and Development	√	√	√	√			√	√		
5	Managerial Behavior and Effectiveness	√	√	√	1	√	√	√	√		
6	Personal Effectiveness	V	V	V	V	V	V	V	V		
7	Labour Legislation	1	√	√	V			√	√		
8	Human Resource Analytics	√	√	1	V	√	√	1	√		
Business Analytics											
1	Data Mining for Business Intelligence	√	√	√	√				√		
2	Big Data Analytics	V	V	V	V			V	V		
3	Cloud computing	1	√	√	V			√	√		
4	Deep Learning and Artificial intelligence	√	√	√	1			√	√		
5	R Programming	V	V	V	V			V	V		
6	Social Media and Web Analytics	√	√	√	√			√	√		
7	Multivariate Data Analysis	V	V	V	V			V	V		
	Opera	ations l	Manag	ement							
1	Logistics Management	V									
2	Materials Management										
3	Product Design										
4	Project Management										
5	Services Operations	√	√	1	1	√	√		√		
6	Supply Chain Management										
7	Quality Management	√	√	1	1	√			√		
	Syst	ems M	[anage	ment							
1	E-Business	1	√	√	V	√			√		
2	Enterprise Resource Planning	√	√			√			√		
3	Software Project and Quality Management	√	√	√	√	√			√		
4	Data Mining for Business Intelligence	√	√	√	√	√			√		
5	Internet of Things	√	√	√	√	√			√		
6	Advanced Database	√	V	√	V	√			√		
6	Management System	$\sqrt{}$	$\sqrt{}$	V	V	V			V		

SEMESTER-I

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	Т	P	C
THEOR	RY						
1	MA1171	Statistics for Management	PCC	3	0	0	3
2	MB1101	Management Concepts	PCC	3	0	0	3
		and Organizational Behavior		3	U	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	PCC	3	0	0	3
		IPR		3	0	U	3
PRACT	ICALS						
8	MB1107	Seminar -1					
		Indian ethos and business	EEC	0	0	4	2
		ethics					
9	MB1108	Business Communications	PCC	0	0	4	2
		(Lab)			Ŭ	·	2
10	MB1109	Comprehensive Viva–I*	EEC	0	0	0	1
11	MB0101	Personality Enrichment	VAC	0	0	2	0
			VAC	· ·	U		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

		SEMESTER	. 11				
SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
THEOF	RY						
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
PRACT	CICALS						
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	Т	P	C
THEOF	RY						
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
PRACT	CICALS						
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	Т	P	С
PRACT	TICALS						
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	Т	P	C
THEOF	RY						
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	Т	P	C
	1	MARKETING MANA	AGEMENT				
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 MANA	GEMENT				
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
	1	HUMAN RESOURCE M	ANAGEMENT		1		
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 ANAL	YTICS	·		•	
1	MB1022	Data Mining for Business	PEC	3	0	0	3
		Intelligence		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	PEC	3	0	0	3
		intelligence		3	0	U	3
5	MB1026	R Programming	PEC	3	0	0	3
6	MB1040	Social Media and Web	PEC	3	0	0	3
		Analytics		3	0	0	3
7	MB1027	Multivariate Data Analysis	PEC	3	0	0	3
		OPERATIONS MANA	GEMENT				
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	Services Operations	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 MANAG	EMENT	·		•	
1	MB1035	E-Business	PEC	3	0	0	3
2	MB1036	Enterprise Resource	PEC	3	0	0	3
		Planning		3	0	U	3
3	MB1037	Software Project and	PEC	3	0	0	3
		Quality Management					
4	MB1022	Data Mining for Business	PEC	3	0	0	3
		Intelligence		3	0	U	3
5	MB1038	Internet of Things	PEC	3	0	0	3
6	MB1039	Advanced Database	PEC	3	0	0	3
		Management System		3	U	U	<u> </u>

AUDIT COURSES*

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	Т	P	C
THEOF	RY						
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	Т	P	C
THEOF	RY						
	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	Т	P	С
THEOF	RY						
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

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MA11'		Γ P C 0 0 3
OBJE	CTIVES	0 0 3
•	To learn the applications of statistics in business decision making.	
UNIT		9
Basic o	definitions and rules for probability, conditional probability independence of events,	
	theorem, and random variables, Probability distributions: Binomial, Poisson, Uniform	CO ₁
	ormal distributions.	
UNIT	II SAMPLING DISTRIBUTION AND ESTIMATION	9
Introdu	action to sampling distributions, sampling distribution of mean and proportion,	
	tion of central limit theorem, sampling techniques. Estimation: Point and Interval	CO2
	tes for population parameters of large sample and small samples, determining the	COZ
sample		
UNIT		9
	nesis testing: one sample and two sample tests for means and proportions of large	
	s(z-test), one sample and two sample tests for means of small samples (t-test), F- test	CO ₃
	sample standard deviations. ANOVA one and two way.	
UNIT		9
	uare tests for independence of attributes and goodness of fit. Sign test for paired data.	
	um test. Kolmogorov-Smirnov – test for goodness of fit, comparing two populations.	CO4
	-Whitney U test and Kruskal Wallis test. One sample run test.	
UNIT	· · · · · · · · · · · · · · · · · · ·	9
	ation analysis, estimation of regression line. Time series analysis: Variation in time	CO.
series,	trend analysis, cyclical variations, seasonal variations and irregular variations.	CO5
	TOTAL: 45 PE	2DIODS
TEXT	BOOKS	LKIODS
	Richard I. Levin, David S. Rubin, Masood H. Siddiqui, Sanjay Rastogi, Statis	stics for
	Management, Pearson Education, 8th Edition, 2017.	21.00 101
2.	Prem S. Mann, Introductory Statistics, Wiley Publications, 9th Edition, 2015.	
	T N Srivastava and Shailaja Rego, Statistics for Management, Tata McGraw Hill, 3rd	d Edition
	2017	

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

- To understand and apply the concepts of probability distributions CO1
- To apply and analyse sampling techniques for research CO₂
- CO3 To apply and analyse various parametric tests for hypothesis testing
- To apply and analyse various non-parametric tests for hypothesis testing CO4
- CO5 To apply and analyse correlation, regression techniques

MAPPING OF COS WITH POS AND PSOS

COs		PRO	GRAM	PROGRAMME SPECIFIC OUTCOMES (PSOs)							
	PO 1	PO 2	PO 3	PO 4	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	\mathbf{L}	T	P	\mathbf{C}
	ORGANIZATIONAL BEHAVIOR				
		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.	CO ₁
W. Taylor, Henri Fayol, Neo – Classical - Mayo & Hawthorne Experiments. Modern era –	
system & contingency approach Managerial Skills.	
UNIT II PLANNING AND ORGANISING	9
Planning - Steps in Planning Process - Scope and Limitations - Forecasting and types of	
Planning - Characteristics of a sound Plan - Management by Objectives (MBO) - Policies	
and Strategies -Scope and Formulation - Decision Making - Types, Techniques and	
Processes. Organisation Structure and Design - Authority and Responsibility Relationships	CO ₂
- Delegation of Authority and Decentralisation – Interdepartmental Coordination – Impact	
of Technology on Organisational design – Mechanistic vs Adoptive Structures -Formal and	
Informal Organisation. Control: meaning, function, Process and types of Control.	
UNIT III INDIVIDUAL BEHAVIOUR	9
Meaning of Organizational behavior, contributing disciplines, importance of organizational	
behavior, Perception and Learning - Personality and Individual Differences - Motivation	CO2
theories and Job Performance - Values, Attitudes and Beliefs - Communication Types -	CO ₃
Process – Barriers – Making Communication Effective.	
UNIT IV GROUP BEHAVIOUR	9
Groups and Teams: Definition, Difference between groups and teams, Stages of Group	
Development Group Cohesiveness Types of teams Group Dynamics - Leadership - Styles	

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

UNIT V EMERGING ASPECTS OF ORGANIZATIONAL BEHAVIOUR

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

TOTAL: 45 PERIODS

9

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		PRO	GRAM	PROGRAMME SPECIFIC OUTCOMES (PSOs)							
	PO 1	PO 2	PO 3	PO 4	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	-

MANAGERIAL ECONOMICS

T \mathbf{C} 3

OBJECTIVES

MB1102

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.

INTRODUCTION UNIT I

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

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,
- 3. Karl E. Case and Ray C. Fair, Principles of Economics, 12th edition, Pearson, Education Asia,
- 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		PRO	GRAM	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 P C 0 3

OBJECTIVES

 Acquire a reasonable knowledge in accounts analysis and evaluate financial statements FINANCIAL ACCOUNTING

9

9

9

9

TOTAL: 45 PERIODS

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

ANALYSIS OF FINANCIAL STATEMENTS

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.

UNIT III **COST ACCOUNTING**

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

UNIT IV MARGINAL COSTING

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

UNIT V **BUDGETING AND VARIANCE ANALYSIS**

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.

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 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

T \mathbf{C}

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. 9

UNIT I **COMMERCIAL LAW**

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 **CO1** and liability of Agent and principal: Rights and duties of principal and agents, termination of

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, CO₂ winding up of companies, Corporate Governance.

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 **CO4** Liability, Registration, Tax Invoice, Credit & Debit Notes, Electronic Way bill, Returns, Payment of taxes including Reverse Charge.

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

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

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
- 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	-	ı	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			

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INFORMATION MANAGEMENT

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,	CO1
Enterprise and functional information systems.	COI
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	CO ₂
diagram.	
UNIT III INTRODUCTION TO DATA BASE MANAGEMENT SYSTEMS	8
DBMS – types and evolution, RDBMS, OODBMS, RODBMS, Data warehousing, Data Mart,	CO2
Data mining.	CO ₃

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, **CO4** Securing the Web.

NEW IT INITIATIVES UNIT V

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

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

1 T P C 3 0 0 3

CO₅

OBJECTIVES

registration – offence & penalties.

• 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.

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	CO ₁
hypotheses – characteristics – Research in an evolutionary perspective – the role of theory in	
research.	
UNIT II RESEARCH DESIGN AND MEASUREMENT	9
Research design – Definition – types of research design – exploratory and causal research design	
- Descriptive and experimental design - different types of experimental design - Validity of	CO2
findings – internal and external validity – Variables in Research – Measurement and scaling –	CO2
Different scales – Construction of instrument – Validity and Reliability of instrument.	
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	CO3
of questionnaire - Sampling plan - Sample size - determinants optimal sample size -	C03
sampling techniques – Probability Vs Non–probability sampling methods.	
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.	CO4
Research report – contents of report – executive summary – types of report - ethics in	CO4
research.	
UNIT V INTELLECTUAL PROPERTY RIGHTS ACT	9
IPR – meaning - objectives - types of IPR – Patent, Copy right, Trademark – Procedure for	

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				

MB1107

SEMINAR - 1 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	-			

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.

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.

UNIT III EFFECTIVE PRESENTATIONS

CO3

CO₂

CO₁

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

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.

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.

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, 13thEdition.
- 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 9 INTRODUCTION TO LINEAR PROGRAMMING (LP) Relevance of quantitative techniques in management decision making. Linear Programming formulation, solution by graphical and simplex methods (Primal - Penalty, Two Phase), Special CO1 cases. Sensitivity Analysis. UNIT II LINEAR PROGRAMMING EXTENSIONS 9 Transportation Models (Minimising and Maximising Problems) - Balanced and unbalanced Problems - Initial Basic feasible solution by N - W Corner Rule, Least cost and Vogel's approximation methods. Check for optimality. Solution by MODI / Stepping Stone method. Case CO₂ 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. 9 UNIT III **DECISION AND GAME THEORIES** Decision making under risk – Decision trees – Decision making under uncertainty. Game Theory - Two-person Zero sum games - Saddle point, Dominance Rule, Convex Linear Combination CO3 (Averages), methods of matrices, graphical and LP solutions. INVENTORY AND JOB SEQUENCING MODELS **UNIT IV** 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 CO₄ and n jobs thro' m machines. UNIT V **OUEUING 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 CO5

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.

TOTAL: 45 PERIODS

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

value of money) – Group Replacement Models.

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

- To apply the transportation and assignment models and to analyze the optimal allocation for
- CO2 Minimization of Cost
 - To apply the strategies in competitive real-world phenomena using concepts from game
- CO3 theory.
- CO4 To analyze the efficiency of job sequencing models to minimize production time and costs

 To apply and analyze the appropriate queuing models and optimal replacement period/policy
- CO5 for a given item/equipment/machine.

MAPPING OF COS WITH POS AND PSOS

COs		PROGRAMME OUTCOMES (POs)									MME IC (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

(

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	-	-				

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HUMAN RESOURCE MANAGEMENT

L	P	T	(
3	Λ	Ω	3

TOTAL: 45 PERIODS

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 9 PERSPECTIVES IN HUMAN RESOURCE MANAGEMENT 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 CO₁ policies – Computer applications in human resource management – Human resource accounting and audit. HUMAN RESOURCE PLANNING AND RECRUITMENT 9 UNIT II Importance of Human Resource Planning – Forecasting human resource requirement – matching supply and demand – Internal and External sources – Organizational Attraction - Recruitment, CO₂ Selection, Induction and Socialization - Theories, Methods and Process. TRAINING AND DEVELOPMENT 9 Types of training methods – purpose – benefits - resistance. Executive development programme CO₃ - Common practices - Benefits - Self-development - Knowledge management. EMPLOYEE ENGAGEMENT 9 Compensation plan - Reward - Motivation - Application of theories of motivation - Career management - Mentoring - Development of mentor - Protégé relationships- Job Satisfaction, CO₄ Employee Engagement, Organizational Citizenship Behavior: Theories, Models. 9 UNIT V PERFORMANCE EVALUATION AND CONTROL Method of performance evaluation – Feedback – Industry practices. Promotion, Demotion, Transfer and Separation – Implication of job change. The control process – Importance – Methods **CO5** - Requirement of effective control systems grievances - Causes - Implications - Redressal methods.

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		PRO	GRAM	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

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,	CO3
Types, Planning tools and techniques.	
UNIT IV PLANNING AND CONTROL OF OPERATIONS	9
Demand Forecasting-Need, Types, Objectives and Steps- Overview of Qualitative and	
Quantitative methods. Operations planning-Resource planning-Inventory Planning and Control.	CO4
Operations Scheduling- Theory of constraints-bottle necks, capacity constrained resources,	CO4
synchronous	
UNIT V QUALITY MANAGEMENT	9
Definitions of quality, The Quality revolution, quality gurus; TQM philosophies; Quality	CO5
management tools, certification and awards. Lean Management - philosophy, elements of JIT	COS

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		PRO		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 – CO1 Production, Finance, Human Relations Management, Information System – Marketing in global environment – International Marketing – Rural Marketing – Prospects and Challenges.

UNIT II MARKETING STRATEGY

9

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

UNIT III MARKETING MIX DECISIONS

9

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

UNIT IV BUYER BEHAVIOUR

9

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

UNIT V MARKETING RESEARCH & TRENDS IN MARKETING

9

CO₅

CO₄

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

TOTAL: 45 PERIODS

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		PRO	GRAM	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

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	CO1
Decision Making, BA for Competitive Advantage.	COI
UNIT II MANAGING RESOURCES FOR BUSINESS ANALYTICS	9
Managing BA Personnel, Data and Technology. Organisational Structures aligning BA.	CO2
Managing Information policy, data quality and change in BA.	CO ₂
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	CO ₃
Descriptive analytics	
UNIT IV PREDICTIVE ANALYTICS	9
Introduction to Predictive analytics - Logic and Data Driven Models - Predictive Analysis	CO 4
Modeling and procedure – Data Mining for Predictive analytics. Analysis of Predictive analytics	CO ₄
UNIT V PRESCRIPTIVE ANALYTICS	9
Introduction to Prescriptive analytics - Prescriptive Modeling - Non Linear Optimisation -	G0-
Demonstrating Business Performance Improvement.	CO ₅
TOTAL: 45 PER	IODS

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		PRO	GRAM		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		PRO	GRAM	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		PRO	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 STRATE

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.

UNIT IV STRATEGY IMPLEMENTATION & EVALUATION

9

CO₃

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

UNIT V OTHER STRATEGIC ISSUES

9

CO5

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

TOTAL: 45 PERIODS

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		PRO	GRAM	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	-

INTERNATIONAL BUSINESS

OBJECTIVE	S

MB1302

UNIT V

L P T C 3 0 0 3

9

CO5

- To understand the theories of International Trade and Investment
- To understand various strategy to enter global markets

• To learn the fundamentals of International Business

- To understand the strategy in Marketing, Marketing, Financials of Global Business
- To understand the issues in Human Resource Management in International Business

9 UNIT I AN OVERVIEW OF INTERNATIONAL BUSINESS Definition and drivers of International Business- Changing Environment of International Business - Country attractiveness - Trends in Globalization - Effect and Benefit of CO₁ Globalization – International Institution: UNCTAD Basic Principles and Major Achievements, Role of IMF, Features of IBRD, Role and Advantage of WTO. 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, CO₂ Eclectic, Market Power, Internationalisation – Instruments of Trade Policy: Voluntary Export Restraints, Administrative Policy, Anti-dumping Policy, Balance of Payment. **GLOBAL ENTRY** 9 UNIT III Strategic compulsions—Strategic options—Global portfolio management-Global entry strategy, different forms of international business, advantages - Organizational issues of international CO₃ business - Organizational structures - Controlling of international business, approaches to control –Performance of global business, performance evaluation system. 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 -**CO4** production and channel management. Foreign Exchange Determination Systems: Basic Concepts types of Exchange Rate Regimes-Factors Affecting Exchange Rates.

Selection of expatriate managers - Managing across cultures - Training and development -

Compensation - Disadvantages of international business - Conflict in international business -

HUMAN RESOURCE MANAGEMENT IN INTERNATIONAL BUSINESS

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		PRO	GRAN	PROGRAMME SPECIFIC OUTCOMES (PSOs)							
	PO 1	PO 2	PO 3	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

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 Need for Creative and innovative thinking for quality – Essential theory about directed creativity,	12
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	CO4
activity, group activity, contextual influences. Assessing Your Personal Creativity and Ability to Innovate, Enhancing Your Creative and Innovative Abilities	
UNIT V INNOVATION	12
Innovation- radical vs evolutionary,—Introduction to TRIZ methodology of Inventive Problem Solving – the essential factors – Innovator's solution – creating and sustaining successful growth	
-Disruptive Innovation model – Segmentive Models – New market disruption – Managing the Strategy Development Process – The Role of Senior Executive in Leading New Growth –	CO5
Passing the Baton, Entrepreneurial Tools for Creativity and Innovation	
TOTAL: 60 PER	TODS

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

- 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		PRO	GRAN		PROGRAMME SPECIFIC OUTCOMES (PSOs)						
	PO 1	PO 2	PO 3	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 3	T	P	C			
OBJECTIVES	3	U	U	3			
 To understand the concepts of effective retailing 							
UNIT I INTRODUCTION				9			
An overview of Global Retailing - Challenges and opportunities - Retail trends in Indi	a – So	ocio					
economic and technological Influences on retail management- Government of Ind			C	O 1			
implications on retails.	_	-					
UNIT II RETAIL FORMATS				9			
Organized and unorganized formats - Different organized retail formats - Characterist	cs of	each		CO2			
format– Emerging trends in retail formats – MNC's role in organized retail formats.							
UNIT III RETAILING DECISIONS				9			
Choice of retail locations - internal and external atmospherics - Positioning of retail	shop	os –					
Building retail store Image - Retail service quality management - Retail Supp	ly Cl	nain	C	O3			
Management- Retail Pricing Decisions. Merchandizing and category management - b	ıying						
UNIT IV RETAIL SHOP MANAGEMENT				9			
Visual Merchandise Management-Space Management-Retail Inventory Managem	ent–R	etail					
accounting and audits - Retail store brands - Retail advertising and promotions	– R	etail	. C	O4			
Management Information Systems -Online retail – Emerging trends.							
UNIT V RETAIL SHOPPER BEHAVIOUR				9			
Understanding of Retail shopper behavior - Shopper Profile Analysis - Shopping							
Process-Factorsinfluencingretailshopperbehavior-ComplaintsManagement- Retail sa	iles 1	force	C	05			
Management– Challenges in Retailing in India							

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.

TOTAL: 45 PERIODS

REFERENCE BOOKS

- 1) Dunne, Retailing, Cengage Learning, 2nd Edition, 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

MB1002

- 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		PRO	GRAM	PROGRAMME SPECIFIC OUTCOMES (PSOs)							
	PO 1	PO 2	PO 3	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	-

3	0	0	3
OBJECTIVES			
• To study and understand the consumer behaviour in-order to effectively utilise the mapotential	rket		
UNIT I INTRODUCTION			9
Understanding Consumer behavior, Consumption, Consumer orientation, Interpretive a	ınd		
Quantitative approaches - Effects of Technology, Demographics and Economy on Consum	ner	\mathbf{C}	O 1
behavior.			
UNIT II INTERNAL INFLUENCES			9
Influencesonconsumerbehavior-motivation-perception-Attitudes and Beliefs - learning a	and	C	:02
Experience-Personality & Self Image.		C	U2
UNIT III EXTERNAL INFLUENCES			9
Socio-Cultural, Cross Culture – Family group–Reference group–Communication – Influences	on	C	:03
Consumer behavior		C	U3
UNIT IV CONSUMER BEHAVIOR MODELS			9
Traditional and Contemporary Consumer behavior model for Individual and industrial buying	ing	\mathbf{C}	O 4

CONSUMER BEHAVIOR

L T P C

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		PRO		PROGRAMME SPECIFIC OUTCOMES (PSOs)							
	PO 1	PO 2	PO 3	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 9 COMMUNICATION (IMC)

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

sales promotion, publicity, public relations, and event sponsorship; 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

9

UNIT III PLANNING FOR MARKETING COMMUNICATION (MARCOM) 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. Creative strategy in implementation and evaluation of marcom-Types of appeals and execution styles. Media planning and selection decisions-steps involved and information needed for media planning. Measuring the effectiveness of all Promotional tools and IMC.

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 CO5 Laws & Ethics: Adverting & Law, Advertising & Ethics.

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 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

CO)s		PRO	GRAM		PROGRAMME SPECIFIC OUTCOMES (PSOs)						
		PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO	1	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

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 CO1 of services—Challenges and issues in Services Marketing.

UNIT II SERVICE MARKETING OPPORTUNITIES

9

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

UNIT III SERVICE DESIGN AND DEVELOPMENT

9

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

UNIT IV SERVICE DELIVERY AND PROMOTION

9

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

UNIT V SERVICE STRATEGIES

9

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

TOTAL: 45 PERIODS

TEXT BOOKS

- 1. VinnieJauhari & Kirti Dutta(2017), Services Marketing, Text and cases, 2ndedition
- 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, 2ndEdition, 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		PRO	GRAM	PROGRAMME SPECIFIC OUTCOMES (PSOs)							
	PO 1	PO 2	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 ins 	sights into the selling and distribution process.				
UNIT I IN	NTRODUCTION				9
Sales managemen	t - Nature and scope. Sales management positions. Personal Selling	- Sc	ope,	,	
theories and strat	egies. Sales forecasting and budgeting decisions - Online selling	– sc	ope,	C	CO1
potential, Merits a	nd Demerits.		•		
UNIT II PI	ERSONAL SELLING PROCESS, SALES TERRITORIES & QU	OT	AS		9
Selling process	and relationship selling. Designing Sales Territories and quota	s. S	Sales	•	CO2
organization struct	tures.			C	.02
UNIT III M	ANAGING THE SALES FORCE				9
Sales force -recrui	tment, selection, training, motivation, compensation and control.			C	CO3
UNIT IV M	ANAGING DISTRIBUTION CHANNELS				9
Distribution Mana	agement - Introduction need and scope. Channels - Strategies and	d le	vels,	•	C O 4
retailing and whol	esaling. Designing channel systems and channel management.			·	.04
UNIT V B.	ASICS OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT				9
Logistics - Scope	e, definition and components. Managing FG Inventory & ware	hou	sing.		
Transportation, So	cope, Modes and role in Supply Chain effectiveness .Use of Info	orma	ation	. (CO5
Technology in On	line Selling and Goods tracking.				

TEXT BOOKS

1. Krishna K. Havaldar, Vasant M. Cavale, Sales and Distribution Management - Text and Cases, Third Edition, McGraw Hill Education, 2017

TOTAL: 45 PERIODS

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
	ding of Brands – Definitions - Branding Concepts – Functions of Brand – 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	CO ₂
foreign brands		
UNIT III	BRAND COMMUNICATIONS	9
Brand image Bu	ailding – Brand Loyalty programme – Brand Promotion Methods – Role of Brand	CO3
ambassadors, co	elebrities— On line Brand Promotions.	COS
UNIT IV	BRAND EXTENSION	9
Brand Adoption	Practices – Different type of brand extension – Factors influencing Decision for	CO4
extension—Re-l	oranding and Re-launching.	CO4
UNIT V	BRAND PERFORMANCE	9
Measuring Bran	nd Performance – Brand Equity Management - Global Branding strategies – Brand	
Audit - Brand	Equity Measurement – Brand Leverage -Role of Brand Managers– Branding	CO ₅
challenges& op	portunities	
	TOTAL : 45 PER	IODS

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.

COs		PRO	GRAM	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 3	T	P	_
OBJECTIVES	3	U	U	3
• To understand the need and importance of maintaining a good customer relations	ship			
UNIT I INTRODUCTION	•			9
Definitions - Concepts and Context of relationship Management - Evolution - Transaction	onal	Vs		
Relationship Approach –CRM as a strategic marketing tool–CRM significance			\mathbf{C}	01
stakeholders				
UNIT II UNDERSTANDING CUSTOMERS				9
Customer information Database - Customer Profile Analysis - Customer per	cep	tion,		
Expectations analysis - Customer behavior in relationship perspectives; individual an	d g	roup	\mathbf{C}	02
customer's – Customer lifetime value – Selection of Profitable customer segments.		-		
UNIT III CRM STRUCTURES				9
Elements of CRM - CRM Process - Strategies for Customer acquisition - Retenti	on a	and	C	Ω2
Prevention of defection– Models of CRM–CRM road map for business applications			C	O3
UNIT IV CRM PLANNING AND IMPLEMENTATION				9
Strategic CRM planning process - Implementation issues - CRM Tools- Analytical	CRN	Λ –	C	Ω_{4}
Operational CRM- Call centers management – Role of CRM Managers			C	O 4
UNIT V TRENDS IN CRM				9
e-CRM Solutions - Data Warehousing - Data mining for CRM - an introduction to	o Cl	RM	C	05
software packages			C	O 5

TEXT BOOKS

- 1. Zikmund. Customer Relationship Management, Wiley 2012
- 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, Macmillan India, 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		PRO	GRAM	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

CO1

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

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 CO2 sales, Modelling Trend and Seasonality, Ratio to Moving Average Method

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, CO3 Customer Life time Value-Conjoint Analysis

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

UNIT V WEB ANALYTICS

9

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

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

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	-		
CO2	3	2	3	2	-	-	-	3	3	2	-		
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

SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

 \mathbf{C}

3

OBJECTIVES • To understand the techniques involved in deciding upon purchase or sale of securities. INVESTMENT SETTING 9 Financial and economic meaning of Investment - Characteristics and objectives of Investment -Investment process -Types of Investment - Investment alternatives - Choice and Evaluation-**CO1** Risk and return concepts – Valuation of bonds and stock. UNIT II **FUNDAMENTAL ANALYSIS** 9 EconomicAnalysis-EconomicforecastingandstockInvestmentDecisions-Forecastingtechniques -Industry Analysis: Industry classification, Industry life cycle – Company Analysis Measuring CO₂ Earnings – Forecasting Earnings – Applied Valuation Techniques – Graham and Dodds investor ratios. TECHNICAL ANALYSIS 9 UNIT III Fundamental Analysis Vs Technical Analysis -- Dow theory - Charting methods - Chart Patterns Trend - Trend reversals - Market Indicators-Moving Average - Exponential moving Average CO₃ Oscillators-RSI-ROC -MACD. Efficient Market theory - Forms of market efficiency -weak, semistrong, strong form – Empirical tests of market efficiency-its application UNIT IV PORTFOLIO CONSTRUCTION AND SELECTION 9 Portfolio analysis - Reduction of portfolio risk through diversification - Portfolio risk -Portfolio Selection- Feasible set of portfolios - Efficient set - Markowitz model - Single index CO4 model —Construction of optimum portfolio-Multi-index model. CAPITAL ASSET PRICING MODEL UNIT V 9 Capital Asset Pricing model - Lending and borrowing - CML - SML - Pricing with CAPM -Arbitrage pricing theory—Portfolio Evaluation - Sharpe's index Treynor's index, Jensen's index — **CO5** Mutual Funds – Portfolio Revision. **TOTAL: 45 PERIODS**

TEXT BOOKS

MB1008

- 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		PRO	GRAM	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	-	-

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	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.

CAPITALANDPRIVATE EQUITY

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

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 — CO2 – Interest rate – Forex – Credit market – operational and solvency risks – NPA's – Current issues on NPA's – M&A' soft banks into securities market.

UNIT III DEVELOPMENT IN BANKING TECHNOLOGY

9

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

UNIT IV ASSET BASED FINANCIAL SERVICES

9

9

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

UNIT V INSURANCE AND OTHER FEE BASED FINANCIAL SERVICES

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

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.

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	-			

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FINANCIAL DERIVATIVES

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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	CO ₁
Securities—Types of Settlement—Uses and Advantages of Derivatives —Risks in Derivatives.	
UNIT II FUTURES CONTRACT	9
Specifications of Futures Contract - Margin Requirements - Marking to Market - Hedging	
	CO ₂
- Delivery Options - Relationship between Future Prices, Forward Prices and Spot Prices.	
UNIT III OPTIONS	9
Definition – Exchange Traded Options, OTC Options – Specifications of Options–Call and	
Put Ontions—American and European Ontions—Intrinsic Value and Time Value of Ontions—	G 0.2
Option payoff, options on Securities, Stock Indices Currencies and Futures–Options pricing	CO ₃
models– Differences between future and Option contracts.	
UNIT IV SWAPS	9
Definition of SWAP – Interest Rate SWAP – Currency SWAP – Role of Financial Intermediary–	
	CO4
Risk	
UNIT V DERIVATIVES IN INDIA	9
Evolution of Derivatives Market in India – Regulations -framework –Exchange Trading in	
Derivatives – Commodity Futures – Contract Terminology and Specifications for Stock	
Options and Index Options in NSE – Contract Terminology and specifications for stock	
futures and Index futures in NSE– Contract Terminology and Specifications for Interest	CO ₅
Rate Derivatives.	

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.

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

C

TOTAL: 45 PERIODS

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	9
	INFUNCTIONS USING SPREAD SHEETS	

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, **CO1** 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.

BOND & EQUITY SHARE VALUATION MODELLING 9 UNIT II 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 CO₂

growth rate valuation modeling with and without growth rates. 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 CO₃ budgeting evaluation: Payback period, NPV, IRR and MIRR.

UNIT IV PORTFOLIO MODELLING 9 Ris , Beta and Annualized Return -Security Market Line Modeling -Portfolio risk

calculation (Equal Proportions)- Portfolio risk optimization(varying proportions)-**CO4** Portfolio construction modeling.

DERIVATIVE MODELLING UNIT V 9

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

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 Edition 2015.
- 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

C

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 **CO1** to International Trade-WTO-Indian EXIM Policy.

UNIT II **EXPORT AND IMPORT FINACE**

9

CO₂

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

9

UNIT III FOREX MANAGEMENT

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 ININTERNATIONAL TRADE

9

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

UNIT V EXPORT PROMOTION SCHEMES

9

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

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

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 – CO Introduction to neo classical economics and expected utility theory – Return predictability in stock

market - Limitations to arbitrage.

UNIT II DECISION AND BEHAVIORAL THEORIES

9

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

UNIT III DECISION MAKING BIASES

9

CO₂

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

UNIT IV ARBITRAGEURS.

9

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

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.

TOTAL: 45 PERIODS

TEXT BOOKS

1. Shleifer, Andrei (2000). In efficient Markets: An Introduction to Behavioral Finance. 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.

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 AND DEVELOPMENT		_	P	C
		3	0	0	3
OBJECTIVE					
	ents understand the transformation in the role of HR functions from being trategic function.	a su	ppo	rt	
UNIT I	CONTEXT OF SHRM				9
SHRM - SHR	M models - strategic HRM vs Traditional HRM - Barriers to Strategic HR	<u> </u>			
Adopting an I	nvestment Perspective –Understanding and Measuring Human capital-Hu	man	side	e (C	'O1
corporate stra	tegies - strategic work redesign - Strategic Capability – Bench Marking.				
UNIT II	HUMAN RESOURCE DEVELOPMENT				9
_	tegic framework for HRM and HRD-Vision, Mission and Values-Import				
	Organisations - HRD Functions - Roles of HRD Professionals -HRD			C	CO2
	HRD practices - Measures of HRD performance - Links to HR, Strate			·	-02
	s – HRD Program Implementation and Evaluation – Recent trends–HRD	Aud	it.		
UNIT III	E-HRM				9
	rofile – e- selection and recruitment - Virtual learning and Orientation – e –		_		
	nent – e-learning strategies - e- Performance management- and Compe			C	CO3
	of mobile applications in HR functions – Development and Implementa		of		
	ning HR portals – Issues in employee privacy – Employee surveys online				0
UNIT IV	CAREER & COMPETENCY DEVELOPMENT		4		9
	ots – Roles – Career stages – Career planning and Process – Career develo				
	eer Motivation and Enrichment – Managing Career plateaus-Designing Efforment Systems – Competencies and Career Management Competency Ma			C	O4
	y and Competency based Compensation.	ıppın	g		
Wodels-Equit UNIT V	EMPLOYEE COACHING & COUNSELING				9
	sching – Role of HR in coaching – Coaching and Performance – Skil	lle fo	ar.		,
	ching—Coaching Effectiveness—Need for Counseling—Role of HR in Coun				
	of Counseling Programs – Counseling Effectiveness – Employee Healt			C	O 5
Welfare Progr		411			
	TOTAL	: 45	PE	RIO	DS
TEXT ROOK					

- 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,
- 2. PaulBoselie.StrategicHumanResourceManagement.TataMcGrawHill.2011
- 3. RobertL. Mathis and John H. Jackson, Human Resource Management, Cengage Learning,
- 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	CO1
Unions– Codes of conduct.	COI
UNIT II INDUSTRIAL CONFLICTS	12
Disputes-Impact - Causes- Strikes- Prevention - Industrial Peace - Government Machinery-	CO2
Conciliation – Arbitration – Adjudication.	COZ
UNIT III LABOUR WELFARE	8
Concept-Objectives-Scope-Need-Voluntary Welfare Measures-Statutory Welfare Measures-	CO3
Labour– Welfare Funds– Education and Training Schemes.	COS
UNIT IV INDUSTRIAL SAFETY	9
Causes of Accidents-Prevention-Safety Provisions-Industrial Health and Hygiene-Importance-	
Problems-Occupational Hazards- Diseases-Psychological problems- Counseling- Statutory	CO ₄
Provisions.	
UNIT V WELFARE OF SPECIAL CATEGORIES OF LABOUR	9
Child Labour-Female Labour - Contract Labour- Construction labour-Agricultural Labour -	CO5
Differently abled Labour -BPO & KPO Labour - Social Assistance -Social Security	CO ₅

Implications.

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

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	CO2
impression management	COZ
UNIT III COGNITIONIN THE SOCIAL WORLD	10
Self, Self Esteem & Social Comparison, self-efficacy, narcissism, Social cognition—	CO3
Schemas—Heuristics – Errors – Attitudes & Behaviour –Persuasion –Cognitive dissonance	
UNIT IV INTERPERSONAL RELATIONS	10
Social identity - Prejudice - Discrimination - Aggression - Interpersonal attraction and	CO4
Relationships	· ·
UNIT V APPLIED SOCIAL PSYCHOLOGY	10
Social Influence - Conformity - Compliance - Social Influence - Prosocial behaviour -	CO5
Groups-Social issues, Stress, personal beliefs and health.	COS
TOTAL . 45 DEDI	ODC

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

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

- CO4 relationships
- CO5 To evaluate social issues stress, personal beliefs and health

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	

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.

UNIT II ORGANIZATIONAL CHANGE

9

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

UNIT III ORGANIZATIONAL DEVELOPMENT

9

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

UNIT IV OD INTERVENTION

9

CO₃

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

UNIT V ORGANIZATIONAL EVOLUTION AND SUSTENANCE

9

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

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
To analyze the various dimensions of organizational change and techniques to
CO2 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		PRO	GRAM	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

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	CO ₁
Managerial Job behavior.	
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	CO ₂
Appraisal Measures – Balanced Scorecard - Feedback – Career Management – Current Practices.	
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	CO ₃
Effectiveness- the Effective Manager as an Optimizer.	
UNIT IV ENVIRONMENTAL ISSUES IN MANAGERIAL EFFECTIVENESS	9
Organizational Processes - Organizational Climate - Leader - Group Influences - Job	CO4
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 PER	IODS

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.
- Joe Tidd, John Bessant, Keith Pavitt, Managing Innovation, Wiley 3rdedition, 2006.
- T.V.Rao, Appraising and Developing Managerial Performance, ExcelBooks, 2002.
- R.M.Omkar, Personality Development and Career Management, S.Chand, 1ST edition, 2008.
- Richard L.Daft, Leadership, Cengage, 1st Indian Reprint2008. 7.

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		PRO	GRAM	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

 \mathbf{C} T

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

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 -CO₂ Participative Decision Making

COMMUNICATION UNIT III

9

Interpersonal Communication - Strategies and Issues - Culture, Diversity and Communication - Communicating Within Teams, Organizations - Communicating Outside Organizations -

CO3

Assertiveness - Persuasion - Strategies.

UNIT IV INFLUENCING OTHERS Influence- Objectives - Methods of Influence - Individual responses to Influence - Exerting Influence- Common Influencing Problems and Solutions- Aggression - Coping with Aggression- Negotiations- Convincing People - Developing and Using Contacts. UNIT V TRANSCATIONAL ANALYSIS AND NLP 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.

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

COs		PRO	GRAM	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

LABOUR LEGISLATIONS

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 familiarise the students to the practical problems inherent in the implementation of labour statutes.

UNIT I FACTORY AND TRADE UNION	9
1.TheFactories Act,1948	CO1
2.The Trade Unions Act 1926	COI
UNIT II WAGES AND DIPUTE	9
3. The Payment of Wages Act, 1936	
4.TheMinimumWagesAct, 1948	CO2
5.TheIndustrialDisputesAct,1947	
UNIT III COMPENSATION	9
6. The Workmen's Compensation Act, 1923	
7.ThePaymentofGratuityAct, 1972	CO3
8.ThePaymentofBonusAct, 1965	
UNIT IV EMPLOYEE WELFARE	9
9. The Employee's Provident Fund & 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. The Child Labour Prevention and Regulation Act, 1986	
TO	OTAL: 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		PRO	GRAM	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

 \mathbf{C}

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

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

HR ANALYTICS II: TRAINING AND DEVELOPMENT UNIT III

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

9

9

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

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- CO4 Career path index- Level wise succession readiness index.

UNIT V HR ANALYTICS IV: WORKFORCE DIVERSITY AND DEVELOPMENT Workforce Diversity and Development Metrics: Employees per manager - Workforce age **CO5**

profiling -Workforce service profiling - Churn over index - Work force diversity index -Gender

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

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		
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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
OBJECTIVES		3	0	0	3
	1 , 1 :				
	how to derive meaning form huge volume of data and information				
 To under 	stand how knowledge discovering process is used in business decision	n mak	ing.		
UNIT I	NTRODUCTION				9
Data mining, Te	xt mining, Web mining, Spatial mining, Process mining, Data ware	house	and	•	101
data marts.				C	O 1
UNIT II	DATA MINING PROCESS				9
Data mining pr	ocess-KDD,CRISP- DM, SEMMA and Domain-Specific, Classific	cation	and		
• .	rmance measures- RSME, MAD, MAP, MAPE, Confusion matrix				
	acteristic curve & AUC; Validation Techniques - hold-out, k-f			•	O2
_	CV, random sub sampling, and bootstrapping.				
	PREDICTION TECHNIQUES				9
	on, Time series- ARIMA, Winter Holts, Vector Autoregressive	e anal	lysis,		100
Multivariate reg	-			C	O3
UNIT IV	CLASSIFICATION AND CLUSTERING TECHNIQUES				9
Classification -	Decision trees, k nearest neighbor, Logistic regression, Discriminar	ıt anal	ysis;		10.4
Clustering; Marl	et basket analysis;			C	O 4
UNIT V	MACHINE LEARNING AND AI				9
Genetic algorith	ms, Neural network, Fuzzy logic, Support Vector Machine, Or	otimiz	ation	_	105
techniques- Ant	Colony, Particle Swarm, DEA			C	O 5
1	TOTA	L : 45	5 PE	RIO	DS
TEXT BOOKS					

- 1. Jaiwei Ham and Micheline Kamber, Data Mining concepts and techniques, Kauffmann Publishers
- 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 Indiapyt.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	-	
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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 C

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..

MINING DATA STREAMS

CO1 9

CO₂

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

UNIT III HADOOP 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 CO₃ Reduce Job run-Failures-Job Scheduling-Shuffle and Sort – Task execution - Map Reduce Types and Formats-Map Reduce Features Hadoop environment.

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 CO₄ Big Insights and Streams.

UNIT V **VISUALIZATION TECHNIQUES** 9

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

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

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	-	

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

3

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

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

9

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		PRO	GRAM		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	C	D1
Learning.		
UNIT II MODELS	9)
Optimization for Training Deep Models: How Learning Differs from Pure Optimization -		
Challenges in Neural Network Optimization - Basic Algorithms - Parameter Initialization	C	02
Strategies - Algorithms with Adaptive Learning Rates - Approximate Second-Order Methods	C	<i>)</i> <u>_</u>
- Optimization Strategies and Meta Algorithms.		
UNIT III INTELLIGENT SYSTEMS	9)
Introduction to Artificial Intelligence: Intelligent Systems - Foundations of AI - Applications		
- Tic-Tac-Toe Game Playing - Problem Solving: State-Space Search and Control Strategies:	C	03
Introduction - General Problem Solving - Exhaustive Searches - Heuristic Search Techniques.		
UNIT IV KNOWLEDGE REPRESENTATION	9)
Advanced Problem-Solving Paradigm: Planning: Introduction - Types of Planning Systems -		
Knowledge Representation: Introduction - Approaches to Knowledge Representation -	C	D4
Knowledge Representation using Semantic Network - Knowledge Representation using		
Frames.		`
UNIT V APPLICATIONS From the Screening and Applications Plants and Screening Track Maintaine and Screening	,)
Expert Systems and Applications: Blackboard Systems - Truth Maintenance Systems -	C	05
Applications of Expert Systems - Machine-Learning Paradigms: Machine-Learning Systems - Supervised and Unsupervised Learnings.	C	O 5
TOTAL: 45 PE	RIO	2O

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.
- 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.
- 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 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	\mathbf{C}

OBJECTIVES

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CO1
9
CO2
COZ
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CO3
COS
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CO4
C U 4
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CO5
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TEXT BOOKS

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

TOTAL: 45 PERIODS

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		PRO		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

interpretation of results

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

UNIT I INTRODUCTION

9

CO₁

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

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

9

UNIT III MULTIPLE LINEAR REGRESSION ANALYSIS, FACTOR ANALYSIS 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—

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

CO5

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

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		PRO	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	CO ₁
framework - Analytics and outcomes, Competitive analysis.	
UNIT II BUSINESS ENVIRONMENT	9
Data - Types of Data, primary data, secondary, Big Data - Data Analysis - tools used for	CO2
analysis - descriptive statistics, comparing means, correlations, nonparametric tests	COZ
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	CO3
competition, completing a task or transaction	
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	CO4
process. 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		PRO	GRAM		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

MB102	8 LOGISTICS MANAGEMENT	L 3	T	P	C 3
OBJEC	CTIVES	3	Ü	U	3
• 7	To learn the need and importance of logistics in product flow.				
UNIT I					9
Definiti	on and Scope of Logistics - Functions & Objectives - Customer Value Chain-	-Ser	vice		
Phases a	and attributes – Value added logistics services – Role of logistics in Competitive soler Service.				CO1
UNIT I					9
	ation channel structure - channel members, channel strategy, role of logistics and	sup	port		
	ibution channels. Logistics requirements of channel members; Logistics outso		•		CO2
	s, benefits, value proposition, 3PL, 4PL, 5PL, 6PL.		υ		
UNIT I					9
Transpo	ortation System – Evolution, Infrastructure and Networks. Freight Management –	-Veh	nicle		
Routing	g - Containerization; Modal Characteristics - Inter-modal Operators and Ti	rans	port		
Econom	nies; International Logistics-objectives, importance in global economy, Character	istic	s of	C	CO3
	supply chains, Incoterms. Selection of service provider; Packaging -				
consider	rations, Material and Cost. Packaging as Unitisation. Consumer and Industrial Pac	kag	ing.		
UNIT I					9
	nance Measurement - Need, System, Levels and Dimensions. Internal and l				
	nance Measurement. Logistics Audit. Total Logistics Cost - Concept, Acc	oun	ting	C	CO4
	s: Cost – Identification, Time Frame and Formatting.				
UNIT			1		9
	es Information Systems – Need, Characteristics and Design. E-Logistics – Struc				
	on. Logistics Resource Management eLRM. Automatic Identification Techn			C	CO5
	Logistics – Scope, design and as a competitive tool. Global Logistics –Operation Classues, ocean and air transportation. Strategic logistics planning; Green Logistics		and		
Strategr	TOTAL		DEI	DIO	nnc
TEXT I	BOOKS	. 43	1 121	NIO	טעי
	Bowersox Donald J, Logistics Management – The Integrated Sur	nlv	Cha	in	
	Process, Tata Mc GrawHill, 2010	'P-J	Ciiu		
	RonaldH.Ballou,BusinessLogisticsandSupplyChainManagement,PearsonEducati	on.5	i th Ed	itio	n.
	2007	,-			,
REFER	RENCE BOOKS				
1. 5	Sople Vinod V, Logistics Management: The Supply Chain Imperative, Pearson E	Educ	atio	n,	
(3 rd Edition, 2012.				
	Coyleetal, The Management of Business Logistics, Thomson Learning, 7th Edition	on, 2	2004		
	Ailawadi C Sathish & Rakesh Singh, Logistics Management, PHI, 2005.				
	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		PRO	GRAM	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

C

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 CO1 enterprise resource planning-making the production plan.

MATERIALS PLANNING

9

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

CO₂

UNIT III INVENTORY MANAGEMENT

9

Policy Decisions-objectives-control -Retail Discounting Model, Newsvendor Model; EOQ and EBO 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

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 CO5 productivity- cost effectiveness-performance measurement

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

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

MAPPING OF COS WITH POS AND PSOS

COs		PRO	GRAM		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	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.

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.

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.

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		PRO	GRAM		5	OGRAN SPECIFI COMES	IC							
	PO 1													
CO1	3	2	3	2	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			

PROJECT MANAGEMENT

L T P C 3 0 0 3

TOTAL: 45 PERIODS

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 –	CO1
Roles- Responsibilities and Selection.	COI
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	CO ₂
response planning.	
UNIT III SCHEDULING & RESOURCE ALLOCATION	9
PERT & CPM Networks - Project durations and floats - Crashing - Resource loading and	CO2
leveling. Simulation for resource allocation. Goldratt's Critical Chain	CO ₃
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	CO ₄
conflict.	
UNIT V CONTROL AND COMPLETION	9
Project Control - Process, Monitoring, Internal and External control, Performance analysis,	
Performance Index Monitoring. Project Evaluation, Reporting and Termination. Project success	CO ₅
and failure - Lessons.	

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		PRO	GRAN	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

SERVICES OPERATIONS MANAGEMENT

T

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 **CO1** strategies, winning customers; Role of information technology; stages in service firm competitiveness.

UNIT II SERVICE DESIGN

9

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

CO₂

SERVICE OUALITY UNIT III

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

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

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 **CO5** Discounting Model, Newsvendor Model; Managing Waiting Lines -Queuing systems, psychology of waiting; Managing for growth- expansion strategies, franchising, globalization.

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,
- 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		PRO	GRAM	PROGRAMME SPECIFIC OUTCOMES (PSOs)											
	PO 1	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	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;	CO ₁
Supply chain strategy - Supply Chain Performance Measures.	
UNIT II STRATEGIC SOURCING	9
Outsourcing – Make Vs buy - Identifying core processes - Market Vs Hierarchy - Make Vs	
buy continuum -Sourcing strategy - Supplier Selection and Contract Negotiation. Creating a	CO ₂
world class supply base- Supplier Development - World Wide Sourcing.	
UNIT III SUPPLY CHAIN NETWORK	9
Distribution Network Design - Role - Factors Influencing Options, Value Addition -	
Distribution Strategies - Models for Facility Location and Capacity allocation. Distribution	CO3
Center Location Models - Supply Chain Network optimization models; Impact of	COS
uncertainty on Network Design - Network Design decisions using Decision trees.	
UNIT IV PLANNING DEMAND, INVENTORY AND SUPPLY	9
Managing supply chain cycle inventory. Uncertainty in the supply chain — Analyzing impact	
of supply chain redesign on the inventory - Risk Pooling - Managing inventory for short life	CO4
- cycle products - multiple item -multiple location inventory management. Pricing and	CO4
Revenue Management	
UNIT V CURRENT TRENDS	9
Supply Chain Integration, SC process restructuring, IT in Supply Chain; Agile Supply	CO5
Chains, Leagile supply chain, Green Supply Chain, Reverse Supply chain; Supply chain	COS

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		PRO	GRAM		PROGRAMME SPECIFIC OUTCOMES (PSOs)										
	PO 1														
CO1	3	3	3	2	3	3	3	1							
CO2	3	3	3	2	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 col service quality. Cost of quality.

UNIT II PRINCIPLES AND PHILOSOPHIES OF QUALITY MANAGEMENT

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

UNIT III STATISTICAL PROCESS CONTROL

9

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 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

CO4

9

UNIT V QUALITY SYSTEMS ORGANIZING AND IMPLEMENTATION
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

9

TOTAL: 45 PERIODS

TEXT BOOKS

- 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

Tools (old & new). Bench marking and POKA YOKE.

- 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		PRO	GRAN	име о	UTCO	MES (POs)		5	OGRAM SPECIFI COMES	IC
	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

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 CO1 Commerce, S-commerce UNIT II TECHNOLOGY INFRASTRUCTURE 10 Internet and World Wide Web, internet protocols - FTP, intranet and extranet, Information CO₂ publishing technology - basics of web server hardware and software UNIT III **BUSINESS APPLICATIONS** 10 Consumer oriented e-business - e-tailing and models - Marketing on web - advertising - e-mail marketing, affiliated programs - e-CRM; online services, Business oriented e-business, CO₃ governance, EDI on the internet, Delivery management system, Web Auctions, Virtual communities and Web portals - Social media marketing e-BUSINESS PAYMENTS AND SECURITY 9 E-payments - Characteristics of payment of systems, protocols, e-cash, e cheque and Micro **CO4** payment systems - internet security - cryptography - security protocols - network security LEGAL AND PRIVACY ISSUES Legal, Ethics and privacy issues - Protection needs and methodology - consumer protection, **CO5** cyberlaws, contract sand warranties, Taxation and encryption policies.

TEXT BOOKS

1. Harvey M.Deitel, Paul J.Deitel, Kate Steinbuhler, e – business and e – commerce for managers, Pearson, 2011.

TOTAL: 45 PERIODS

- 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 SPECIFIC OUTCOMES (PSOs) PSO1 PSO2 PSO3									
	PO 1	PO 2	PSO2	PSO3							
CO1	2	2	2	1	1	-	-	1	2	2	-
CO2	2	2	2	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.

UNIT II ERP SOLUTIONS AND FUNCTIONAL MODULES

10

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

UNIT III ERP IMPLEMENTATION

10

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

UNIT IV POST IMPLEMENTATION

8

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

UNIT V EMERGING TRENDS ON ERP

9

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

TOTAL: 45 PERIODS

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		PRO	GRAN	PROGRAMME SPECIFIC OUTCOMES (PSO							
	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	2	2	-				
CO3	2	2	2	1	1	-	-	1	2	2	-
CO4	2	2	2	1	1	2	2	-			
CO5	2	2	2	1	1	-	-	1	2	2	-

MB1037 SOFTWARE PROJECT AND QUALITY MANAGEMENT

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.

UNIT II SOFTWARE MEASUREMENTS

9

CO₂

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

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.

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.

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		PRO	GRAM	MES (POs)		PROGRAMME SPECIFIC OUTCOMES (PSOs)				
	PO 1	PO 2	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

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.

UNIT	II	IoT	ARCH	ITECTURE
		~ ~ ~		

9

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

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 - CO3 Programming Rash berry Pi with Python - Other IoT Devices

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 CO4 Chef.

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.

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 Perspectivel, 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^{II}, 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		PRO	GRAM		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

T \mathbf{C}

OBJECTIVES

MB1039

- 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 CO₁ databases, Virtualization, Active Databases - Embedded databases - Web databases.

SOFTWARE MEASUREMENTS

9

Query Processing basics and optimization – Heuristic Optimization – Transactions Models – Concurrency Control – Recovery – Security and Authorization – Storage – Indexing and Hashing CO₂ - ISAM - B-Trees - Kd Trees - X Trees - Dynamic Hashing.

UNIT III DISTRIBUTED DATABASES

9

Distributed Databases - Queries - Optimization Access Strategies - Distributed Transactions CO₃ Management – Concurrency Control – Reliability

UNIT IV OBJECT ORIENTED DATABASES

9

Object Oriented Concepts - Data Object Models - Object Oriented Databases - Issues in OODBMS - Object Oriented Relational Databases - Object Definition Languages - Object CO4 Query Languages

UNIT V **EMERGING TRENDS**

Data Mining - Data warehousing - Star, Snowflake, Fact Constellation; open source database **CO5** systems, Scripting Language, JDBC, ODBC

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, Pearson Education, 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		PRO	GRAM	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	-

NON - FUNCTIONAL ELECTIVES

MB1211 ENTREPRENEURSHIP DEVELOPMENT

L T P C

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.

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 CO2 Regulations.

UNIT III BUSINESS PLAN PREPARATION

9

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

UNIT IV LAUNCHING OF SMALL BUSINESS

(

CO₃

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

CO5

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

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.

 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.
- 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 SPECIFIC OUTCOMES (PSOs)								
	PO 1	PO 2	PO 3	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 CO1

Definition & nature Business ethics, Characteristics, Ethical theories; Causes of unethical behavior; Ethical abuses; Work ethics; Code of conduct; Public good.

Management of Ethios Ethios analysis [Hagman modell, Ethios I dilamma, Ethios in question	
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	CO2
ethics in Corporate ethics evaluation. Business and ecological / environmental issues in the Indian	
context and case studies.	
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	C O3
environment and their impact on business operations, Salient features of Indian culture and values.	
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	C O 4
Industries.	
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	C O5

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		PRO		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	1	3	3	2	3
CO5	3	2	2	1	-	-	1	3	3	2	3

MB1213 EVENT MANAGEMENT \mathbf{C}

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-Contracts and Agreements-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& CO3 Evaluating sponsorship.

UNIT IV EVENT OPERATION

9

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

CO4

SAFETY & EVENT EVALUATION UNIT V

9

Risk assessment-Safety officer, Medical Manager - Venue, Structural safety - Food safety -Occupational safety-Fire Prevention—Sanitary facilities-Vehicle traffic Waste CO5 Management. EventImpact-EventEvaluationProcess-ServiceQuality-CustomerSatisfaction.

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.
 - To create event plans and analyse various activities relating to implementation of events and
- CO2 create budgets.
 - To apply marketing mix for various types of events and analyse the various sponsorship
- CO3 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 SPECIFIC OUTCOMES (PSOs)								
	PO 1 PO 2 PO 3 PO 4 PO 5 PO 6 PO 7 PO 8										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

UNIT III

SUSTAINABILITY MANAGEMENT

L T P C

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.

UNIT II CORPORATE SUSTAINABILITY AND RESPONSIBILITY

9

Corporate sustainability perimeter, corporate sustainability institutional framework, integration of sustainability into strategic planning and regular business practices, fundamentals of stakeholder engagement.

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.

UNIT IV SUSTAINABILITY AND INNOVATION

8

9

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

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 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	-