PANIMALAR ENGINEERING COLLEGE

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai

M.B.A - MASTER OF BUSINESS ADMINISTRATION

REGULATION 2023

CURRICULUM & SYLLABUS

VISION:

Emerge as a leading business school by empowering the next generation of managers to be globally adept, innovative, and industry-ready, while fostering responsibility and contributions to the nation.

MISSION:

M1: Foster critical thinking and decision-making in managerial aspirants through quality education**.**

M2: Cultivate industry-ready leaders, blending professional competence with intellectual acuity**.**

M3: Empower students to master diverse managerial skills and competencies across functional areas.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):

MBA programme curriculum is designed to prepare the post graduate students

PEO1: Shall possess a robust understanding of core business practices, enabling them to adeptly analyze situations and strategize effectively in decision-making.

PEO2: Shall be well-versed in emerging technologies and will acquire the skills necessary to meet evolving industry competencies.

PEO3: Shall be equipped with a comprehensive perspective, empowering them to tackle complex business challenges through innovative solutions.

PEO4: Shall have leadership prowess, a strong ethical foundation, and a lifelong commitment to learning**.**

PROGRAMME OUTCOMES (POs):

On successful completion of the programme:

PO1: Domain Knowledge - Apply knowledge of management theories and practices to solve business problems

PO2: Problem Analysis - Foster analytical and critical thinking abilities for data-based decision making

PO3: Leadership - Ability to develop value-based leadership ability.

PO4: Environmental Sustainability - Ability to understand, analyse and communicate global, economic, legal and ethical aspects of business.

PO5: Team Collaboration - Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.

PO6: Life Long Learning - Display commitment to continuous learning in all functional management domains in a technology-based environment.

PO7: Ingenious Skills - Ability to prioritize and demonstrate resourcefulness in taking up challenging assignments in a dynamic organizational context.

PO8: Social Responsiveness and Ethics - Ability to understand the significance of social responsibility and ethics values in business for its long run sustainability in a competitive scenario

			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
YEAR 1	SEM 1	Business statistics for Decision Making	✓	✓				✓	✓	✓
		Management Concepts and Organizational Behavior	✓	✓	✓		✓	✓	✓	✓
		Managerial economics	✓	✓		✓			✓	✓
		Accounting for Decision making	✓	✓	✓		✓	✓	✓	✓
		Legal and Business Environment	✓			✓	✓	✓	✓	✓
		Information System Management	✓	✓	✓		✓	✓	✓	
		Marketing Management	✓		✓	✓	✓	✓	✓	✓
		Spreadsheet Application Laboratory	✓	✓		✓		✓	✓	✓
		Business Communications Laboratory	✓		✓		✓		✓	
	SEM 2	Quantitative Techniques for Decision Making	✓	✓		✓			✓	✓
		Financial Decisions for Managers	✓	✓	✓		✓	✓	✓	✓
		Human Resource Management	✓		✓	✓	✓	✓	✓	
		Operations Management	✓	✓			✓		✓	
		Business Research Methods	✓	✓			✓	✓		✓
		Business Analytics	✓	✓				✓	✓	
		Data Analysis and Business Modeling Laboratory	✓	✓				✓	✓	
		Case Laboratory	✓	✓	✓	✓	✓	✓	✓	✓

	NON-FUNCTIONAL ELECTIVES								
SEM 2	Entrepreneurship Development	✓	✓	✓	✓	✓	✓	✓	✓
	Event Management	✓	✓	✓		✓	✓	✓	✓
	Sustainable Management	✓	✓	✓	✓		✓		✓

			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
YEAR 2	SEM 3	Strategic Management	✓	✓	✓	✓	✓	✓	✓	✓
		International Business Management	✓	✓	✓	✓	✓	✓	✓	✓
		Elective I								
		Elective II								
		Elective III								
		Elective IV								
		Elective V								
		Elective VI								
		Rural Community Engagement	✓	✓				✓	✓	
		Summer Internship	✓	✓	✓	✓	✓	✓	✓	✓
	SEM 4	Project Work	✓	✓	✓	✓	✓	✓	✓	✓

		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
	Stream/ Specialization : Finance								
	Security Analysis and Portfolio management	✓	✓	✓	✓			✓	✓
	Merchant Banking and Financial Services	✓	✓			✓	✓	✓	
	Derivatives Management	✓	✓			✓	✓	✓	
	Financial Modeling	✓	✓			✓	✓	✓	
	Fin tech and Block Chain Applications in Finance	✓	✓			✓	✓	✓	
	Applications of Artificial Intelligence and Machine Learning in Finance	✓	✓			✓	✓	✓	
	Business Analysis and Valuation	✓	✓			✓	✓	✓	
	Financial Risk Management and insurance	✓	✓			✓	✓	✓	
	International Finance	✓	✓		✓		✓		
	Stream/ Specialization : Human Resource Management								
	Learning and Development	✓		✓	✓	✓	✓	✓	
	Human Resource Analytics	✓	✓	✓		✓	✓	✓	
	Organizational Design Change and Development	✓	✓	✓		✓	✓	✓	✓
	Compensation and Rewards Management	✓	✓				✓	✓	✓
	Emotional Intelligence for Managerial Effectiveness	✓	✓				✓	✓	✓
	Talent Management	✓	✓	✓		✓	✓	✓	
	Performance Management	✓	✓	✓		✓	✓	✓	
	Negotiation and Conflict Management	✓	✓	✓	✓	✓		✓	✓

	Industrial Relations and Labor Legislations	✓	✓	✓	✓		✓	✓	✓
Stream/ Specialization : Operations									
	Project Management	✓	✓	✓	✓	✓	✓	✓	✓
	Services Operations Management	✓	✓	✓	✓	✓	✓	✓	✓
	Supply Chain Management	✓	✓	✓	✓	✓	✓	✓	✓
	Product Design	✓	✓				✓	✓	✓
	Materials Management	✓	✓				✓	✓	✓
	Supply Chain Analytics	✓	✓	✓	✓	✓	✓	✓	✓
	Logistics Management		✓			✓	✓	✓	✓
	Design Thinking	✓	✓	✓	✓		✓	✓	✓
	Total Productive Maintenance and Lean Management	✓	✓	✓	✓	✓	✓	✓	✓
Stream/ Specialization : Marketing									
	Digital Marketing	✓	✓	✓	✓	✓	✓	✓	✓
	Marketing Analytics	✓	✓		✓		✓	✓	✓
	Integrated Marketing Communication	✓	✓	✓		✓	✓	✓	
	Customer Relationship Management	✓	✓	✓		✓	✓	✓	✓
	Retail Marketing	✓	✓	✓	✓	✓	✓	✓	✓
	Consumer Behavior	✓	✓	✓	✓	✓	✓	✓	✓
	Brand Management	✓	✓	✓	✓	✓	✓	✓	✓
	Services Marketing	✓	✓	✓	✓	✓	✓	✓	✓
	Sales and Distribution Management	✓	✓	✓	✓	✓	✓	✓	✓
	Stream/ Specialization : Business Analytics								
	Data Mining for Business Intelligence	✓	✓	✓	✓	✓	✓	✓	✓
	Data Analytics with R Programming	✓	✓		✓	✓	✓	✓	
	Data Visualization for Managers	✓	✓		✓	✓	✓	✓	
	Social Media Web Analytics	✓	✓				✓	✓	
	Artificial Intelligence and Deep Learning	✓	✓				✓	✓	
	Multivariate Data Analysis	✓	✓	✓	✓		✓	✓	✓
	Business Analytics using Python	✓	✓		✓	✓	✓	✓	
	Business Intelligence, Big Data, Cloud Computing	✓	✓		✓	✓	✓	✓	
	Block Chain Technology	✓	✓		✓	✓	✓	✓	

M.B.A.-MASTER OF BUSINESS ADMINISTRATION

CHOICE BASED CREDIT SYSTEM (CBCS)

I-IV SEMESTER CURRICULUM AND SYLLABI (REGULATION 2023)

Semester I							
S. No	**COURSE CODE**	**COURSE TITLE**	**Category**	**L/T/P**	**Contact Hours**	**Credit**	**Ext / Int Weightage**
Theory Courses							
1.	23MA3101	Business statistics for Decision Making	PCC	3/1/0	4	4	60/40
2.	23MB3102	Management Concepts and Organizational Behavior	PCC	4/0/0	4	4	60/40
3.	23MB3103	Managerial Economics	PCC	4/0/0	4	4	60/40
4.	23MB3104	Accounting for Decision Making	PCC	3/1/0	4	4	60/40
5.	23MB3105	Legal and Business Environment	PCC	3/0/0	3	3	60/40
6.	23MB3106	Information Systems Management	PCC	3/0/0	3	3	60/40
7.	23MB3107	Marketing Management	PCC	4/0/0	4	4	60/40
Practical Courses							
8.	23MB3108	Spreadsheet Application Laboratory	PCC	0/0/4	4	2	40/60
9.	23MB3109	Business Communication Laboratory	EEC	0/0/4	4	2	40/60
TOTAL					**34**	**30**	

Semester II							
S. No	**COURSE CODE**	**COURSETITLE**	**Category**	**L/T/P**	**Contact Hours**	**Credit**	**Ext / Int Weightage**
Theory Courses							
1.	23MB3201	Quantitative Techniques for Decision Making	PCC	3/1/0	4	4	60/40
2.	23MB3202	Financial Decisions for Managers	PCC	3/1/0	4	4	60/40
3.	23MB3203	Human Resource Management	PCC	4/0/0	4	4	60/40
4.	23MB3204	Operations Management	PCC	3/1/0	4	4	60/40
5.	23MB3205	Business Research Methods	PCC	4/0/0	4	4	60/40
6.	23MB3206	Business Analytics	PCC	3/1/0	4	4	60/40
7.		Non-Functional Elective	PEC	3/0/0	3	3	60/40
Practical Courses							
8.	23MB3220	Data Analysis and Business Modelling Laboratory	PCC	0/0/4	4	2	40/60
9.	23MB3221	Case Laboratory	PCC	0/0/4	4	2	40/60
TOTAL					**35**	**31**	

NON- FUNCTIONAL ELECTIVE							
S. No	**COURSE CODE**	**COURSE TITLE**	**Category**	**L/T/P**	**Contact Hours**	**Credit**	**Ext / Int Weightage**
Theory Courses							
1.	23MB3210	Entrepreneurship Development	PEC	3/0/0	3	3	60/40
2.	23MB3211	Event Management	PEC	3/0/0	3	3	60/40
3.	23MB3212	Sustainable Management	PEC	3/0/0	3	3	60/40

Semester III							
S. No	**COURSE CODE**	**COURSE TITLE**	**Category**	**L/T/P**	**Contact Hours**	**Credit**	**Ext / Int Weightage**
Theory Courses							
1.	23MB3301	Strategic Management	PCC	3/0/0	3	3	60/40
2.	23MB3302	International Business Management	PCC	3/0/0	3	3	60/40
3.		Elective I	PEC	3/0/0	3	3	60/40
4.		Elective II	PEC	3/0/0	3	3	60/40
5.		Elective III	PEC	3/0/0	3	3	60/40
6.		Elective IV	PEC	3/0/0	3	3	60/40
7.		Elective V	PEC	3/0/0	3	3	60/40
8.		Elective VI	PEC	3/0/0	3	3	60/40
Practical Courses							
9.	23MB3390	Rural Community Engagement	EEC	0/0/4	4	2	40/60
10	23MB3391	Summer Internship	EEC	0/0/6	6	3	40/60
TOTAL					**34**	**29**	

PROFESSIONAL ELECTIVES FOR SEMESTER III

Stream/ Specialization: Finance							
S. No	**COURSE CODE**	**COURSE TITLE**	**Category**	**L/T/P**	**Contact Hours**	**Credit**	**Ext / Int Weightage**
Theory Courses							
1.	23MB3303	Security Analysis and Portfolio management	PEC	3/0/0	3	3	60/40
2.	23MB3304	Merchant Banking and Financial Services	PEC	3/0/0	3	3	60/40
3.	23MB3305	Derivatives Management	PEC	3/0/0	3	3	60/40
4.	23MB3306	Financial Modeling	PEC	3/0/0	3	3	60/40

5.	23MB3307	Fintech and Block Chain Applications in Finance	PEC	3/0/0	3	3	60/40
6.	23MB3308	Applications of Artificial Intelligence and Machine Learning in Finance	PEC	3/0/0	3	3	60/40
7.	23MB3309	Business Analysis and Valuation	PEC	3/0/0	3	3	60/40
8.	23MB3310	Financial Risk Management and Insurance	PEC	3/0/0	3	3	60/40
9.	23MB3311	International Finance	PEC	3/0/0	3	3	60/40

Stream/ Specialization: Human Resource Management							
S. No	**COURSE CODE**	**COURSE TITLE**	**Category**	**L/T/P**	**Contact Hours**	**Credit**	**Ext / Int Weightage**
Theory Courses							
1.	23MB3316	Learning and Development	PEC	3/0/0	3	3	60/40
2.	23MB3317	Human Resource Analytics	PEC	3/0/0	3	3	60/40
3.	23MB3318	Organizational Design Change and Development	PEC	3/0/0	3	3	60/40
4.	23MB3319	Compensation and Rewards Management	PEC	3/0/0	3	3	60/40
5.	23MB3320	Emotional Intelligence for Managerial Effectiveness	PEC	3/0/0	3	3	60/40
6.	23MB3321	Talent Management	PEC	3/0/0	3	3	60/40
7.	23MB3322	Performance Management	PEC	3/0/0	3	3	60/40
8.	23MB3323	Negotiation and conflict Management	PEC	3/0/0	3	3	60/40
9.	23MB3324	Industrial Relations and Labor Legislations	PEC	3/0/0	3	3	60/40

Stream/ Specialization: Operation							
S. No	**COURSE CODE**	**COURSE TITLE**	**Category**	**L/T/P**	**Contact Hours**	**Credit**	**Ext / Int Weightage**
Theory Courses							
1.	23MB3336	Project Management	PEC	3/0/0	3	3	60/40
2.	23MB3337	Services Operations Management	PEC	3/0/0	3	3	60/40
3.	23MB3338	Supply Chain Management	PEC	3/0/0	3	3	60/40
4.	23MB3339	Product Design	PEC	3/0/0	3	3	60/40
5.	23MB3340	Materials Management	PEC	3/0/0	3	3	60/40
6.	23MB3341	Supply Chain Analytics	PEC	3/0/0	3	3	60/40
7.	23MB3342	Logistics Management	PEC	3/0/0	3	3	60/40
8.	23MB3343	Design Thinking	PEC	3/0/0	3	3	60/40
9.	23MB3344	Total Productive Maintenance and Lean Management	PEC	3/0/0	3	3	60/40

Stream/ Specialization: Marketing							
S. No	**COURSE CODE**	**COURSE TITLE**	**Category**	**L/T/P**	**Contact Hours**	**Credit**	**Ext / Int Weightage**
Theory Courses							
1.	23MB3326	Digital Marketing	PEC	3/0/0	3	3	60/40
2.	23MB3327	Marketing Analytics	PEC	3/0/0	3	3	60/40
3.	23MB3328	Integrated Marketing Communication	PEC	3/0/0	3	3	60/40
4.	23MB3329	Customer Relationship Management	PEC	3/0/0	3	3	60/40
5.	23MB3330	Retail Marketing	PEC	3/0/0	3	3	60/40
6.	23MB3331	Consumer Behavior	PEC	3/0/0	3	3	60/40
7.	23MB3332	Brand Management	PEC	3/0/0	3	3	60/40
8.	23MB3333	Services Marketing	PEC	3/0/0	3	3	60/40
9.	23MB3334	Sales and Distribution Management	PEC	3/0/0	3	3	60/40

Stream/ Specialization: Business Analytics							
S. No	**COURSE CODE**	**COURSE TITLE**	**Category**	**L/T/P**	**Contact Hours**	**Credit**	**Ext / Int Weightage**
Theory Courses							
1.	23MB3346	Data Mining for Business Intelligence	PEC	3/0/0	3	3	60/40
2.	23MB3347	Data Analytics with R Programming	PEC	3/0/0	3	3	60/40
3.	23MB3348	Data Visualization for Managers	PEC	3/0/0	3	3	60/40
4.	23MB3349	Social Media Web Analytics	PEC	3/0/0	3	3	60/40
5.	23MB3350	Artificial Intelligence and Deep Learning	PEC	3/0/0	3	3	60/40
6.	23MB3351	Multivariate Data Analysis	PEC	3/0/0	3	3	60/40
7.	23MB3352	Business Analytics Using Python	PEC	3/0/0	3	3	60/40
8.	23MB3353	Business Intelligence, Big Data, Cloud Computing	PEC	3/0/0	3	3	60/40
9.	23MB3354	Block Chain Technology	PEC	3/0/0	3	3	60/40

Semester IV							
S. No	**COURSE CODE**	**COURSE TITLE**	**Category**	**L/T/P**	**Contact Hours**	**Credit**	**Ext / Int Weightage**
Theory Courses							
1.	23MB3401	Project Work	EEC	0/0/24	24	12	40/60
TOTAL					**24**	**12**	

TOTAL CREDIT DISTRIBUTION

S.No.	Subject Area	Credits Per Semester								Credit Total	Percentage %
	Semester	I	II	III	IV	V	VI	VII	VIII		
1.	Professional Core Course [PCC]	28	28	6	-	-	-	-	-	62	60.8
2.	Professional Elective Course [PEC]	-	3	18	-	-	-	-	-	21	20.6
3.	Employability Enhancement Course [EEC]	2	-	5	12	-	-	-	-	19	18.6
	Total	30	31	29	12	-	-	-	-	102	100

23MA3101	BUSINESS STATISTICS FOR DECISION MAKING	L	T	P	C
		3	1	0	4

COURSE OBJECTIVE:

- To introduce the basic concepts of probability and random variables
- To provide an understanding of Estimation of parameters and analyze their application to achieve effective use of inferential Statistics using Sampling distribution.
- To identify the various functional solutions for firms using testing of hypothesis
- To impart the students about non-parametric hypothesis.
- To understand the concept of correlation and regression.

UNIT I PROBABILITY AND DISTRIBUTIONS 12

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

UNIT II SAMPLING DISTRIBUTION AND ESTIMATION 12

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

UNIT III TESTING OF HYPOTHESIS-PARAMETIRC TESTS 12

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

UNIT IV NON-PARAMETRIC TESTS 12

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

UNITV CORRELATION AND REGRESSION 12

Correlation-Coefficient of determination -Rank Correlation-Regression-Estimation of Regression line-Multiple Regression- Method of Least Squares- Standard Error of estimate.

TOTAL:60 PERIODS

COURSE OUTCOME

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

CO1 Apply the basic concepts of random variables and probability theory to Solve industrial problems

CO2 Apply the concept of sampling distribution and estimation theory in industrial production and forecasting

CO3 Apply hypothesis for various research questions or business scenarios

CO4 Evaluate the principles and concepts underlying non-parametric tests.

CO5 Apply how to identify situations where non-parametric tests are appropriate.

CO6 Apply the concept of correlation, regression, time series analysis in real life situation

TEXT BOOKS

1. Richard I. Levin, David S. Rubin, Sanjay Rastogi Masood Husain Siddiqui, Statistics for Management, Pearson Education, 8th Edition, 2017.
2. Aczel A.D. and Sounder pandianJ., "CompleteBusinessStatistics", 7th edition, Tata Mc Graw Hill Publishing Company Ltd., New Delhi, 2017.

REFERENCE BOOKS

1. Prem.S.Mann, Introductory Statistics,10th Edition,Wiley India,2020.
2. Gareth James, Daniela Witten, Trevor Hastie, Robert Tibshirani, An Introduction to Statistical Learning with Applications in R, 2nd Edition Springer, 2021.
3. Anderson D.R., Sweeney D.J. and Williams T.A., Statistics for business and economics, 13th edition, Thomson (South-Western) Asia, Singapore, 2015.
4. Srivatsava TN and Shailaja Rego, Statistics for Management, 3rd Edition, Tata McGraw Hill, 2017.
5. N.D. Vohra, Business Statistics,2nd Edition,TataMcGrawHill,2021.
6. Ken Black,Applied Business Statistics,10th Edition,WileyIndiaEdition,2019.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	-	-	-	-	-	-	-
CO2	3	2	-	-	-	-	1	-
CO3	2	3	-	-	-	1	2	-
CO4	-	-	-	-	-	-	-	-
CO5	2	3	-	-	-	2	3	2
CO6	-	-	-	-	-	-	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3102	MANAGEMENT CONCEPTS AND ORGANIZATIONAL BEHAVIOR	L	T	P	C
		4	0	0	4

COURSE OBJECTIVE:

- To acquaint the basic concepts of management in order to aid in understanding how an organization functions.
- To understand the complexity and wide variety of issues managers face in today's business firms.
- To make better decisions about motivating and coordinating human behaviour to achieve organisational goals
- To understand Individual and group behaviour at work place so as to improve the effectiveness of an organization
- The course will also focus on understanding the challenges, Indian experiences, approaches and cases.

UNIT -I NATURE AND THEORIES OF MANAGEMENT 11

Management- meaning, levels, management as an art or science, Managerial functions and Roles, Evolution of management thought.

UNIT -II PLANNING AND ORGANISING 14

Planning: Steps, Scope, Limitations and Types - Characteristics of a sound Plan - Management by Objectives (MBO) - Policies and Strategies – Scope and Formulation. Decision Making - Types, Techniques and Processes.
Organising: Organisation Structure and Design - Authority and Responsibility Relationships - Delegation of Authority and Decentralisation. Control: meaning, function, Process and types – **Case Studies**.

UNIT -III FUNDAMENTALS OF OB AND INDIVIDUALBEHAVIOUR 11

Organizational Behaviour: Meaning, Importance, contributing disciplines; Perception, Learning and Personality. Motivation - Characteristic, Theories.Values, Attitudes and Beliefs. Communication - Types, Process, Barriers, Effective Communication

UNIT -IV GROUP BEHAVIOUR 12

Groups and Teams: definition, differences, stages of group development, Group Cohesiveness, types of teams, Group Dynamics - Leadership - Styles - Approaches – Power and Politics, Organisational Climate and Culture, Conflict: concept, sources, Types,Stages, Management of conflict; Organisational Change and Development – **Case Studies**.

UNIT-V EMERGING ASPECTS OF ORGANIZATIONAL BEHAVIOUR 12

Comparative Management Styles and approaches - Japanese Management Practices; Organizational Creativity and Innovation, Organizational behavior across cultures - Managing International Workforce, Productivity and cultural contingencies, Cross cultural communication, Management of Diversity – **Case studies**.

TOTAL : 60 PERIODS

COURSE OUTCOMES

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

CO1 Summarize the various management concepts and skills required in the business world

CO2 Apply the various functions of management in a real time management context.

CO3 Analyze the complexities associated with management of individual behavior in the organizations.

CO4 Evaluate the significance of employee motivation and communication in organizational productivity.

CO5 Apply the skill set to manage group behavior in Organizations.

CO6 Analyze the current trends in managing organizational behavior.

TEXTBOOKS

1. Stephen P. Robbins, David A. DeCenzo, and Mary Coulter, Fundamentals of management, Prentice Hall of India, 2012.
2. Harold Koontz and Heinz Weihrich, Essentials of Management: An International and Leadership Perspective, 9th edition, Tata McGraw-Hill Education, 2012.
3. Robbins. S. Organisational Behaviour, X-edn., Prentice-Hall, India.

REFERENCE BOOKS

1. Durai, P. (2015). Principles of Management, Text and Cases. New Delhi: Pearson Education.
2. Charles W. L Hill and Steven L McShane, „Principles of Management, McGraw Hill Education, Special Indian Edition, 2007.
3. Umasekaran, Organisational Behaviour. 6. VSP Rao, V Hari Krishna – Management: Text and Cases, Excel Books, I Edition, 2004.
4. Williams, Tripathy (2016), MGMT-Principles of Management, Cengage Learning.
5. Heinz Weihrich, Mark V Cannice, and Harold Koontz, Management-A global entrepreneurial perspective, Tata McGraw Hill, 12th edition, 2008

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	3	3	-	3	3	2	3
CO2	3	-	-	-	-	3	-	2
CO3	2	2	2	-	3	3	2	2
CO4	3	2	3	-	3	3	-	-
CO5	2		3	-		2	3	2
CO6	3	2	2	-	3	3	3	3

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3103	MANAGERIAL ECONOMICS	L	T	P	C
		4	0	0	4

COURSE OBJECTIVE:

- To enable the students to understand the various Economic concepts and its application to business.
- To make the students to analyze the variables influencing consumer behavior pertaining to demand and supply.
- To expose the students to the concept of production function and its relevance in business decision-making
- To provide students with a comprehensive understanding of how product and factor markets function in different market structures
- To impart knowledge about Macroeconomic principles and the influence of various economic policies

UNIT -I **INTRODUCTION** **10**

Concept of Economy - Economics - Types – Microeconomics and Macroeconomics- Nature and Scope of Managerial Economics - Managerial Economics and decision-making - themes of economics – scarcity and efficiency – three fundamental economic problems – Production possibility frontiers (PPF) – the role of markets and government – Externalities.

UNIT -II **DEMAND AND SUPPLY ANALYSIS** **15**

Market – Demand and Supply-Determinants-Market equilibrium –elasticity of demand and supply- Consumer behavior : Approaches - Utility - Law of diminishing marginal utility – Equi marginal Utility - Indifference curve - consumer equilibrium

UNIT -III **PRODUCTION FUNCTION AND COST ANALYSIS** **15**

Production – Production Function – Law of Variable Proportion – Law of Returns to scale – economies Vs dis-economies of scale – Concepts of cost –Short-run and long-run cost function.

UNIT -IV **PRODUCT AND FACTOR MARKET** **10**

Product market – different market structures – Price Determination under Perfect Competition and Imperfect Competition. Factor market – Land, Labour and capital – determination of factor price.

UNIT -V **PERFORMANCE OF AN ECONOMY AND MACRO ECONOMICS** **10**

Macro Economics - Economic aggregates and its computation – circular flow of Macro Economic activity – National income determination – Multiplier – Accelerator- Unemployment – Okun's law – Inflation - Phillips curve - the role of monetary policy - fiscal Policy – Impacts.

TOTAL: 60 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehension of various Economic concepts and their impacts on business decisions.

CO2 Analyze consumer behavior from a managerial perspective related to demand and supply.

CO3 Demonstration of production function and the implications of economies and diseconomies of scale.

CO4 Evaluate the significance of various costs in the short run and long run and its impact on business decisions.

CO5 Analyze the various features of product and factor market in perfect and imperfect market conditions

CO6 Effective application of macroeconomic concepts in analyzing business trends.

TEXT BOOKS

1. Paul A. Samuelson, William D .Nordhaus, Sudip Chaudhuri and Anindya Sen,Economics,19th edition, Tata McGraw Hill, New Delhi, 2010.
2. William Boyes and Michael Melvin, Text book of economics,Biztantra, 9th Edition,2012.
3. Managerial Economics: Concepts and Applications (SIE), THOMAS&MAURICE, McGraw Hill Education.

REFERENCE BOOKS

1. N.GregoryMankiw,PrinciplesofEconomics,7thedition,Cengage,NewDelhi,2017
2. Richard Lipsey and Alec Charystal, Economics, 12th edition, Oxford, University Press, New Delhi,2011.
3. Managerial Economics, D.N.Dwivedi, Vikas Publication.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	3	-	-	3	3
CO2	2	3	-	3	-	-	3	3
CO3	2	2	-	3	-	-	3	3
CO4	2	3	-	3	-	-	3	3
CO5	2	2	-	3	-	-	3	3
CO6	3	3	-	3	-	-	3	3

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3104	ACCOUNTING FOR DECISION MAKING	L	T	P	C
		3	1	0	4

COURSE OBJECTIVE:

- To analyse financial statements to assess the financial performance and financial position of a business.
- To use financial ratios to assess the financial performance and financial position of a business.
- To understand the different types of cost and to prepare a job cost sheet.
- To analyse decision-making problems, such as make-or-buy decisions, sell-or-process decisions, and product mix decisions.
- To prepare a cash budget, master budget, flexible budgets, and production budget to improve profitability and financial stability

UNIT- I FINANCIAL ACCOUNTING 12

Conceptual Framework of Accounting: Users of Financial Statements; Accounting Concepts and Conventions. Accounting Records and Systems: (Journal, General Ledger, Trial Balance). Preparation of final accounts and corporate profit and loss statement with adjustments, Balance sheet.

UNIT -II ANALYSIS OF FINANCIAL STATEMENTS 12

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

UNIT -III COST ACCOUNTING 12

Cost Accounts – Classification of costs – Job cost sheet – Job order costing – Process costing – Activity Based Costing, Target Costing.

UNIT -IV MARGINAL COSTING AND DECISION MAKING 12

Marginal Costing and profit planning– Cost, Volume, Profit Analysis–Break Even Analysis–Decision making problems– Make or Buy decision, Sell or further process decision, Product decisions-product modification decision; product elimination decision, Product mix decision; product distribution decision.

UNIT -V BUDGETING AND VARIANCE ANALYSIS 12

Budget-Budgetarycontrol-types-CashBudget,MasterBudget,FlexibleBudgets,and productionBudget.Standardcostingandanalysisofvariances:Material,Labour, Overhead and Profit.(Usage, Price, Volume & Sale Price variances

TOTAL: 60 PERIODS

COURSE OUTCOME(S):

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

CO1 Apply grounding knowledge of financial accounting concepts.
CO2 Analyze to prepare financial statement analysis.
CO3 Analyze the concepts of management and cost accounting techniques.
CO4 Apply marginal costing and profit planning process during decision making analysis.
CO5 Assess the accountancy standards of practices across sectors.

CO6 Analyze managerial decision using budgetary techniques.

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. Jan Williams, Susan Haka, Mark S Bettner, Joseph V Carcello, Financial and Managerial Accounting - The basis for business Decisions, 18th edition, Tata McGraw Hill Publishers, 2017.
4. Charles T. Horngren, Gary L. Sundem, David Burgstahler, Jeff Schatzberg, Introduction to Management Accounting, PHI Learning, 2014, 16th edition.
5. Earl K. Stice & James D. Stice, Financial Accounting, Reporting and Analysis, 8th edition, Cengage Learning, 2015.
6. N.M. Singhvi, Ruzbeh J. Bodhanwala, Management Accounting – Text and cases, 3rd edition, PHI Learning, 2018.
7. Ashish K. Bhattacharya, Introduction to Financial Statement Analysis, Elsevier, 201

REFERENCE BOOKS

1. Ashish K. Bhattacharya: Financial Accounting for Business Managers: Prentice-Hallof India Pvt Ltd.: Year of Publication 2006.

2. R. Narayanaswamy: Financial Accounting: A Managerial Perspective: Prentice-Hall of India Pvt. Ltd.: Year of Publication 2002.

3. Robert N. Anthony, David F. Hawkins, Kenneth A. Merchant: Accounting Text & Cases Tata McGraw Hill Publishing Co. Ltd.: Year of Publication 2003.

4. Horngren, Sundem, Elliott: Introduction to Financial Accounting: Pearson Education: Year of Publication 2005.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	3	3	-	3	3	3	3
CO2	3	3	3	-	3	3	3	3
CO3	3	3	3	-	3	3	3	3
CO4	2	2	2	-	3	3	2	3
CO5	2	2	3	-	3	3	3	3
CO6	3	3	3	-	3	3	3	3

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3105	LEGAL AND BUSINESS ENVIRONMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Familiarize with the laws that have an influence on business.
- Enable the students to comprehend the basic rules of laws
- Build an aptitude to interpret laws and legal language.
- Apply rules of business laws to real-world conflicts and management challenges.
- To provide a basic understanding of various statutory provisions that confronts business managers while taking decisions.

UNIT -I COMMERCIAL LAW 9

THE INDIAN CONTRACT ACT 1872

Definition of contract, essentials elements and types of a contract, E-Contracts, Formation of a contract, performance of contracts, breach of contract and its remedies, Quasi contracts.

Contract of Agency: Nature of agency, Creation and types of agents, Authority and liability of Agent and principal: Rights and duties of principal and agents, termination of agency.

UNIT -II SPECIAL CONTRACTS 9

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 -III COMPANY LAW 2013 9

Major principles – Nature and types of companies, Formation, Memorandum and Articles of Association, Prospectus, Power, Duties, and Liabilities of Directors, Winding up of Companies, Corporate Governance.

UNIT -IV CORPORATE TAX & GST 9

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

UNIT -V OTHER MISCELLANEOUS ACTS 9

Consumer Protection Act 2018 – Consumer rights, Procedures for Consumer grievances redressal, Types of consumer redressal Machineries and Forums- - Cybercrimes, IT Act 2000 and 2002, Cyber Laws. Indian IP Systems – Introduction – IPR –Patent – Copyright - Trademark, IPR filing process.

TOTAL: 45 PERIODS

COURSE OUTCOMES:

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

CO1 Comprehend the fundamental legal principles in developing various contracts and commercial laws in the business world.

CO2 Comprehend the various legal instruments used in forging business transactions.

CO3 Interpret the various forms of business associations and elements of Corporate Governance.

CO4 Apply the guidelines of Corporate Tax and Goods and Services Tax.

CO5 Summarize the Consumer Protection Act.

CO6 Interpret Cyber Laws and Intellectual Property Rights for evolving businesses.

TEXTBOOKS:

1. N.D. Kapoor, Elements of Mercantile Law, Sultan Chand and Company, India, 2017.
2. P.K. Goel, Business Law for Managers, Biztantara Publishers, India, 2017.
3. Akhileshwar Pathak, Legal Aspects of Business, Tata McGraw Hill, 6th Edition 2018.
4. Ravinder Kumar, Legal Aspects of Business, New Delhi: Cengage Learning, 4th edition, 2016.
5. Sinha P.K, Dr. Vinod Singhania, Text Book of Indirect Tax, Taxman Publication, New Delhi.
6. Taxmann, GST Manual with GST Law Guide & Digest of Landmark Rulings, 11th Edition, 2019

REFERENCE BOOKS

1. P.P.S. Gogna, Mercantile Law, S. Chand & Co. Ltd., India, Fourth Edition, 2015.
2. Dr. Vinod K. Singhania, Direct Taxes Planning and Management, 11th, 2007.
3. Richard Stim, Intellectual Property - Copyrights, Trademarks, and Patents, Cengage Learning, 15th edition 2017.
4. Daniel Albuquerque, Legal Aspect of Business, Oxford, 2nd edition, 2017.
5. Ravinder Kumar – Legal Aspect of Business. – Cengage Learning, 4th Edition - 2016. V.S. Datey, GST Ready Reckoner, 9th edition, 2019.

ONLINECOURSES/RESOURCES:

https://onlinecourses.nptel.ac.in/noc21_mg96/preview

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	-	-	3	1	2	2	2
CO2	3	-	-	3	-	2	2	3
CO3	2		-	3	2	2	1	3
CO4	2	-	-	3	-	2	-	2
CO5	2	-	-	3	-	2	-	2
CO6	3	-	-	3	-	-	-	3

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3106	INFORMATION SYSTEMS MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- To create awareness about data, information, and different types of information systems in business for effective decision making.
- To understand the system development methodologies.
- To understand database management system. To learn about the case tools and UML diagram and its types.
- To learn the various technologies in information system and its security and control
- To gain knowledge on new IT initiatives in business.

UNIT -I INTRODUCTION 10

Data, Information, Information System, evolution, types based on functions and hierarchy, Enterprise and Functional Information Systems, DSS, EIS, KMS, GIS. System development methodologies: Waterfall, Spiral, Agile.

UNIT -II SYSTEM ANALYSIS AND DESIGN 8

Systems Analysis and Design, Data Flow Diagram (DFD), Decision Table, Entity Relationship Diagram (ERD), Object Oriented Analysis and Design (OOAD), UML diagram.

UNIT -III DATA BASE MANAGEMENT SYSTEMS 9

DBMS Evolution and Types: HDBMS, NDBMS, RDBMS, OODBMS, and RODBMS. Data Warehousing, Data Mart, and Data Mining.

UNIT -IV INTEGRATED SYSTEMS,SECURITY AND CONTROL 9

Knowledge based Decision Support Systems, Integrating Social Media and Mobile Technologies in Information System, Security, IS Vulnerability, Disaster Management, Computer Crimes, Securing the Web

UNIT -V NEW ITINITIATIVES 9

Introduction to Deep learning, Big Data, Pervasive Computing, Cloud Computing - Advancements in Artificial Intelligence (AI), IoT, Block Chain Technology, Quantum computing, and Robotic Process Automation.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Describe the basic concepts of data, types of information system & its application in Business.
CO2 Apply knowledge of the system development methodologies.
CO3 Comprehend the skill of case tools and UML diagram.
CO4 Analyze the current trends in database management system and its applications.
CO5 Analyze various technologies in information system and its security.
CO6 Evaluate the knowledge on effective application of information systems in business.

TEXTBOOKS

1. Robert Schultheis and Mary Summer, Management Information Systems – The Managers View, Tata McGraw Hill, 2008.
2. Kenneth C. Laudon and Jane Price Laudon, Management Information Systems – Managing the digital firm, PHI Learning/ Pearson Education, PHI, Asia, 2012.
3. Panneerselvam. R, Database Management Systems, 3rd Edition, PHI Learning, 2018.
4. Turban,McLean and Wetherbe, Information Technology for Management – Transforming Organisations in the Digital Economy, John Wiley, 6th Edition, 2008.
5. James O Brien, Management Information Systems – Managing Information Technology in the E-business enterprise, Tata McGraw Hill, 2004.

REFERENCE BOOKS

1. Raplh Stair and George Reynolds, Information Systems, Cengage Learning, 10th Edition, 2012.
2. Corey Schou and Dan Shoemaker, Information Assurance for the Enterprise – A Roadmap to Information Security, Tata McGraw Hill, 2007.
3. Frederick Gallegor, Sandra Senft, Daniel P. Manson and Carol Gonzales, Information Technology Control and Audit, Auerbach Publications, 4th Edition, 2013.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	3	-	-	-	-	3	-
CO2	2	3	3	-	1	3	2	-
CO3	3	1	3	-	2	3	2	-
CO4	2	-	3	-	1	3	-	-
CO5	3	3	3	-	-	3	1	-
CO6	-	1	3	-	2	2	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3107	MARKETING MANAGEMENT	L	T	P	C
		4	0	0	4

COURSE OBJECTIVE:

- To introduce student about building blocks of marketing.
- To provide students with the necessary tools and frameworks to enable them to make proactive marketing decisions.
- To enable the student to understand the 'Marketing mix' elements and the strategies and principles underlying the modern marketing practices.
- To make the student to establish the relevance of consumer behaviour theories and concepts to marketing decisions.
- To integrate different promotional strategies across the spectrum of marketing platforms offered online and offline.

UNIT -I INTRODUCTION 12

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

UNIT -II MARKETING STRATEGY 12

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 - Content marketing and blogging - Case Study.

UNIT -III MARKETING MIXES DECISIONS 12

Product planning and development – Product life cycle – New product Development and Management - Defining Market Segmentation - Targeting and Positioning − Brand Positioning and Differentiation – Channel Management – Managing Integrated Marketing Channels – Managing Retailing, Wholesaling and Logistics − Advertising and Sales Promotions - Pricing Objectives, Policies and Methods - Physical evidence in the marketing mix - Case Study.

UNIT -IV CUSTOMER ORIENTED BEHAVIOUR 12

Understanding Industrial and Consumer Buyer Behaviour — Influencing factors – Buyer Behaviour Models - Online buyer behaviour − Building and measuring customer satisfaction Customer relationships management - Customer acquisition, Retaining, Defection − Creating Long Term Loyalty Relationships - current trends in consumer behaviour around the world - Case Study.

UNIT -V MARKETING RESEARCH & GLOBAL TRENDS IN MARKETING 12

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 - Global Marketing Perspectives - Case Study

TOTAL: 60 PERIODS

COURSE OUTCOME(S):

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

CO1 Describe Practical application of contemporary marketing theories to the demands of business environment

CO2 Comprehend the enhancement of knowledge and understanding of marketing strategies to be implemented for consumer and industrial marketing to have a competitive edge

CO3 Apply the effective usage of the various marketing mix elements and management of integrated marketing channels.

CO4 Analyze the nature of consumer buying behaviour through the various influencing factors.

CO5 Analyze the marketing research and awareness towards the current marketing practices at the domestic.

CO6 Create the new and knowledge pertaining to the new trends in the arena of marketing.

TEXT BOOKS

1. Philip T. Kotler and Kevin Lane Keller, Marketing Management, Prentice Hall India, 15th Edition, 2017.
2. KS Chandrasekar, ¯Marketing management-Text and Cases‖, Tata McGraw Hill Education, 2012.
3. Lamb, Hair, Sharma, McDaniel – Marketing – An Innovative approach to learning and teaching A south Asian perspective, Cengage Learning, 2012.
4. Ramasamy, V.S, Nama Kumari, S, Marketing Management: Global Perspective Indian Context, Macmillan Education, New Delhi, 6th edition, 2018.
5. A. NAG, Marketing successfully - A Professional Perspective, Macmillan 2008.
6. Philip Kotler, Gay Armstrong, Prafulla Agnihotri, Principles of Marketing, 7th edition, 2018.

REFERENCE BOOKS

1. Paul Baines, Chris Fill, Kelly Page, Marketing, Asian edition, Oxford University Press, 5thedition, 2019.
2. Micheal R. Czinkota, Masaaki Kotabe, Marketing Management, Vikas Thomson Learning, 2nd edition 2006.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	-	-	-	2	-	3	-
CO2	-	-	2	3	-	1	3	-
CO3	3	-	2	2	-	1	-	3
CO4	3	-	-	3	2	-	-	2
CO5	2	-	2	3	-	2	2	3
CO6	3	-	-	-	2	2	-	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3108	SPREADSHEET APPLICATION LABORATORY	L	T	P	C
		0	0	4	2

COURSE OBJECTIVE:

- Develop proficiency in using fundamental features of the selected spreadsheet application, including navigating the interface, entering data, and formatting cells.
- Learn to organize and manage data effectively by creating, modifying, and deleting worksheets, rows, and columns.
- Explore techniques for visualizing data using charts, graphs, and conditional formatting to communicate insights effectively.
- Learn to automate repetitive tasks through the use of macros and simple scripting to enhance productivity.
- Develop the ability to analyze problems and find creative solutions using the features and functions of the spreadsheet application.

UNIT -I SPREADSHEET ENVIRONMENT 20

Basic text and cell formatting – Selecting ranges - Freeze pane – Using comments – Text functions for purification of large dataset – Date format and conversion - Auto completion of series - Table formatting and highlighting - Conditional formatting – Visualizing data using graphs - Working with multiple worksheets.

UNIT -II FORMULAS AND FUNCTIONS 20

Auto filter and custom filter – Auto sort and custom sort - Relative and absolute cell references – Writing formulas – Logical Operators - Lookup function – Index command -Statistical functions - Financial functions

UNIT -III ADVANCED FUNCTIONS 20

Scenario manager - Goal seek – Sensitivity analysis - Data table - Solver, Analysis Tool Pak-Data mining using Pivot Tables-Data validation-Working with validation formula-Sharing workbooks: Highlighting changes, Reviewing changes Security features : Unlocking cells, Worksheet protection, Workbook protection.

TOTAL: 60 PERIODS

COURSE OUTCOME(S):

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

CO1 Apply font styles, sizes, colors, and text alignment to enhance readability.

CO2 Create structured tables for better data organization and apply table formatting options.

CO3 Design custom filters to refine data based on complex criteria.

CO4 Analyze financial functions (e.g., PMT, FV, NPV) to perform calculations related to investments, loans, and financial planning.

CO5 Understand and utilize the Scenario Manager to create, manage, and compare different scenarios in a spreadsheet

CO6 Apply workbooks with others and enable change tracking to highlight modifications made by different users.

TEXTBOOKS

1. Arora Ritu, ―Advance excel 2016 training guide‖, BP Publications,2017
2. David,M., Levine,S., David,F.S.,& Kathryn, A., ―Statistics for Managers Using Microsoft Excel‖, Pearson Education Limited, 2016
3.John Walkenbach, ―Microsoft Excel2016 Bible:The Comprehensive Tutorial Resource‖, Wiley Publications, 2015

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	1	-	1	-	2	1	1
CO2	3	1	-	1	-	1	1	1
CO3	1	1	-	3	-	1	1	2
CO4	3	2	-	3	-	1	2	2
CO5	3	1	-	2	-	1	1	-
CO6	2	1	-	1	-	1	-	1

Internal Assessment		End Semester Examination
Evaluation of Laboratory Observation, Record	Test	Practical
75	25	100
60 %		40%

23MB3109	BUSINESS COMMUNICATION LABORATORY	L	T	P	C
		0	0	4	2

COURSE OBJECTIVE:

- To help the students to acquire some of the necessary skills to handle day-to-day managerial roles and responsibilities.
- To empower learners to acquire the proficiency in verbal & non-verbal communication to meet out the industry standards.
- To inculcate learners to master in the art of written communication
- To train learners to speak fluently and flawlessly in all kinds of communicative contexts with all nationalities.
- To use technology to facilitate the communication process

UNIT -I INTRODUCTION AND TYPES OF BUSINESS COMMUNICATION 12

Introduction to Business Communication: Principles of effective communication, Barriers of Communication - Principles of Nonverbal Communication: Professional dressing and body language. Role Playing, Debates and Quiz –Presentations and Extempore -speech of introduction, speech of thanks, occasional speech, theme speech. - Group communication: Meetings, group discussions - Cross Cultural Dimensions of Business Communication.

UNIT -II BUSINESS COMMUNICATION WRITING MODELS AND TOOLS 12

The strategies to learn the art of writing E-mails, Minutes, Circulars, Agenda, Notices, Reports of different kinds, Proposals, Memorandums, Responding to enquiries, complaints & applications. Business letters, Resume/CV, job application letters, Case Studies. Exercises on Corporate Writing, Executive Summary of Documents, Creative Writing, Poster Making, Framing Advertisements, Slogans and Captions.

UNIT -III EFFECTIVE PRESENTATION 12

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

UNIT -IV INTERVIEW SKILLS 12

Mastering the art of giving interviews in - selection or placement interviews, discipline interviews, appraisal interviews, exit interviews, web/video conferencing. Skill set required for a successful employer, Interpersonal Personal Relationship, Emotional Intelligence, Stress Management, Time Management – Group Discussion, Structure & process of GD, Successful GD Techniques.

UNIT -V REPORT WRITING 12

Objectives of report, types of report, Report Planning, Types of Reports, Developing an outline, Nature of Headings, Ordering of Points, Logical Sequencing, Graphs, Charts, Executive Summary, List of Illustration, Report Writing. Features of publication (Newspaper, Magazines, Newsletters, Notice- board).

TOTAL: 60 PERIODS

COURSE OUTCOME(S):

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

CO1 Develop good managerial communication skills.
CO2 Summarize different forms of written communication required in a business context.

CO3 Develop good presentation skills.
CO4 Create in-depth understanding of interview skills.
CO5 Comprehend the ability to prepare business reports.

CO6 Develop the learners to speak fluently and flawlessly in all kinds of communicative contexts with all nationalities.

TEXTBOOKS

1. E.H. McGrath, S.J. 2012, Basic Managerial Skills for All. 9th edition. Prentice-Hall of India, New Delhi.
2. Josh Sreedharan. 2014, The Four Skills of Communication, Cambridge University Press, India.
3. Sanjay Kumar & Pushpalatha, 2018 Communication Skills - A Workbook. Oxford University Press.
4. Rajendra Pal, J.S. Korlahalli, Essentials of Business Communication by, Sultan Chand & Sons, 13th Edition.
5. C.S. Rayadu, Communication by, HPH, 2015.
6. R.C. Sharma, Krishna Mohan, Business Correspondence & Report Writing, Tata McGraw Hill, 5th Edition, 2017.

REFERENCEBOOKS

1. Raymond V. Lesikar, Flatley, Basic Business Communication Skills for Empowering the Internet Generation by, M.E., TMGH, New Delhi, 10th edition, 2004
2. Ludlow R, Panton, The Essence of Effective Communications, Prentice Hall of India Pvt. Ltd. 2, 1995
3. Malcolm Goodale, Developing Communication Skills, 2nd Edition Professional Presentations, Cambridge University Press
4. Supplementary Reading Material Business Communication-Harvard Business Essentials Series, HBS Press
5. Excellence in Business Communication by Thill, J. V. & Bovee, G. L, McGraw Hill, New York.
6. Business Communications: From Process to Product by Bowman, J.P. & Branchaw, P.P., Dryden Press, Chicago

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	-	2	-	3	-	3	-
CO2	1	-	3	-	-	-	3	-
CO3	2	-	2	-	2	-	2	-
CO4	3	-	2	-	1	-	2	-
CO5	1	-	2	-	2	-	1	-
CO6	2	-	2	-	-	-	2	-

Internal Assessment		End Semester Examination
Evaluation of Laboratory Observation, Record	Test	Practical
75	25	100
60 %		40%

23MB3201	QUANTITATIVE TECHNIQUES FOR DECISION MAKING	L	T	P	C
		3	1	0	4

COURSE OBJECTIVE:

- Explain the importance of quantitative techniques in decision-making processes.
- Formulate linear programming problems and apply graphical and simplex methods for optimization.
- Apply decision analysis methods (decision matrices, pay-off tables) to make decisions involving multiple criteria.
- Optimize inventory levels considering costs, demand, and lead time.
- Model and analyze queuing systems to optimize service levels and reduce waiting times.

UNIT -I INTRODUCTION TO LINEAR PROGRAMMING (LP) 12

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

UNIT -II LINEAR PROGRAMMING EXTENSIONS 12

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

UNIT -III DECISION AND GAME THEORIES 12

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

UNIT -IV INVENTORY AND REPLACEMENT MODELS 12

Inventory Models – EOQ and EBQ Models (With and without shortages), Quantity Discount Models. Replacement Models - Individual replacement Models (With and without time value of money) – Group Replacement Models.

UNIT -V QUEUING THEORY AND SIMULATION 12

Queuing Theory - single and multi-channel models – infinite number of customers and infinite calling source. Monte Carlo simulation – use of random numbers, application of simulation techniques

TOTAL: 60 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the principles of Linear programming in product mix decisions

CO2 Apply transportation networks factors such as costs, Capacities, constraints and demands.

CO3 Apply assignment models optimization techniques such as Hungarian algorithm to solve assignment problems efficiently and effectively.

CO4 Analysis various techniques such as Game theory and decision making under risk and certainty, uncertainty.

CO5 Solutions of various inventory and replacement techniques and apply in real time decision making.

CO6 Evaluate the allocation of scarce resources using Queuing and simulation in real time scenario.

TEXT BOOKS

1. Quantitative techniques for Decision Making – Anand Sharma, Himalaya publishing house.
2. Quantitative Techniques for Decision Making – M.P. Gupta and R.B. Sharma 4th Edition, Prentice Hall India Private Limited.

REFERENCE BOOKS

1. N.D Vohra, Quantitative Techniques in Management, Tata McGraw Hill, 2010.
2. G. Srinivasan, Operations Research – Principles and Applications, 2nd edition, PHI,2011.
3. Paneerselvam R., Operations Research, Prentice Hall of India, Fourth Print, 2008.
4. Hamdy A Taha, Introduction to Operations Research, Prentice Hall India, Tenth Edition, Third Indian Reprint 2019.
5. Bernard W. Taylor III, Introduction to Management Science, 9th Edition, Pearson ed

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	3	-	2	-	-	2	2
CO2	2	3	-	2	-	-	2	2
CO3	2	3	-	2	-	-	3	2
CO4	2	3	-	2	-	-	3	2
CO5	2	3	-	2	-	-	3	2
CO6	2	3	-	2	-	-	2	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3202	FINANCIAL DECISIONS FOR MANAGERS	L	T	P	C
		3	1	0	4

COURSE OBJECTIVE:

- To educate the concept of finance and its concern with investment, financing, and dividend decision.
- To provide the concepts of capital budgeting, the appraisal of capital budgeting decisions, and the role of cost of capital in it.
- To explain various sources of finance, dividend policy, and capital structure.
- To impart knowledge on working capital management and enable them to forecast.
- To explain various sources of finance and basic knowledge about capital markets.

UNIT -I FOUNDATIONS OF FINANCE 12

Introduction to finance – Financial Management – Nature, scope, and functions of Finance,Role of finance manager - Major financial decisions - Time value of money - Valuation of securities. **Case study**

UNIT -II COST OF CAPITAL & INVESTMENT DECISION 12

Concept and measurement of the cost of capital - Specific cost - overall cost of capital – Computation of WACC, Capital Budgeting: Principles and techniques - Nature of capital budgeting –Identifying relevant cash flows –Evaluation Techniques: Payback, Accounting rateofreturn,NetPresentValue,InternalRateofReturn,ProfitabilityIndex -Comparison Of DCF techniques. **Case study**

UNIT -III FINANCING AND DIVIDEND DECISION 12

Leverages - Operating and Financial leverage – measurement of leverages – degree of Operating& Financial leverage – Combined leverage, EBIT –EPS Analysis -Indifference point, Dividend decision-Factors determining dividend policy-Types of dividend policies –forms of dividend. Walter's Model, Gordon's model, and MM model. **Case study**

UNIT -IV WORKING CAPITAL MANAGEMENT 12

Meaning of working capital: Determinants and estimation of working capital-Working capital finance: Trade credit, Bank finance, and Commercial paper. **Case study**

UNIT -V LONG TERM SOURCES OF FINANCE 12

Sources of Long-term finance: Shares, debentures, and term loans, lease Finance, hire purchase, venture capital financing. **Case study**

TOTAL: 60 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the basic concepts of Financial management and applying to take managerial decisions making.

CO2 Apply the various techniques of Managing finance in an organization and explore certain issues in Capital budgeting.

CO3 Evaluate the relationship between capital structure and cost of capital

CO4 Comprehend the aspects of dividend decision and determinants of appropriate Dividend Policy

CO5 Analyze the importance of working capital management and forecast the Requirements of working capital.

CO6 Summarize the characteristics of various sources of long-term financing.

TEXTBOOKS

1. Khan, M.Y. and P.K. Jain, Financial Management – Text and Problems, 8th Edition., Tata McGraw Hill Publishing Co., New Delhi, 2017.
2. Srivastava. R.M., Financial Management, Himalaya Publication House, Mumbai, 2016.

REFERENCE BOOKS

1. Eugene F. Brigham & Michael C. Ehrhardt, Financial Management: Theory and Practice, Cengage Publication, 2015.
2. James C Van Horne, Fundamentals of Financial Management, 13th Edition, PHI Learning Publisher, New Delhi, 2015.
3. Kuchhal, S.C., Financial Management, Allahabad, Chaitanya Publishing House, 2014.
4. Pandey, I.M., Financial Management, (10th Edition), Vikas Publishing House, 2018, New Delhi.
5. Prasanna Chandra, Financial Management: Theory and Practice, Tata McGraw Hill, 2014.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	-	2	3	3	3
CO2	2	3	3	-	-	1	2	-
CO3	-	3	1	-	-	2	3	3
CO4	2	-	-	-	1	3	-	-
CO5	-	3	-	-	-	-	2	-
CO6	1	1	-	-	3	2	3	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3203	HUMAN RESOURCE MANAGEMENT	L	T	P	C
		4	0	0	4

COURSE OBJECTIVE:

- To familiarize the students about the concepts, methods, techniques, and issues involved in managing human resources and the challenges in the current scenario.
- To introduce students to the various practices pertaining to human resource planning in organizations.
- To create awareness among the students regarding the various development programmes available for managers and the compensation pattern in organizations.
- To keep the students abreast about the significance and various methods of performance appraisal carried out in organizations.
- To help employees to know the significance of career management, thereby helping them to choose their career paths.

UNIT –I PERSPECTIVES IN HRM 12

Evolution of HRM, Concept, Nature, Scope, Objectives and Functions of Human Resource Management – Role of HR manager – HR policies – Challenges of HRM in a globalized economy and cross cultural environment.

UNIT –II HR PLANNING 12

HR Planning: Importance of HRP, Job analysis, Job evaluation, Job design – Forecasting human resource requirement – matching supply and demand – Internal and External sources – Talent Acquisition: Recruitment Sources & objectives – Selection Concept and Procedure –Selection Tests and Interviews – Induction – Socialization – benefits – Case Study – Prevailing Practices

UNIT –III TRAINING AND EXECUTIVE DEVELOPMENT 12

Training: Types of training methods, purpose, benefits, and resistance. Executive development: Executive development programme – Common practices – Benefits, Self-development – Knowledge management, Case Study – Current Practices.

UNIT –IV COMPENSATION & PERFORMANCE EVALUATION 12

Compensation: Concepts, Types, Factors determining compensation, Compensation plan, and Reward. Performance evaluation: Methods of performance evaluation, Feedback, Industry practices- Human Resource Mobility – Promotion, Demotion, Transfer and Separation**, Case Study**

UNIT –V NAVIGATING HUMAN RESOURCE LAND SCAPE 12

Career management – Development of mentor – Protégé relationships –Employee Engagement – Employee Grievances – Grievance Handling Procedures – Redressal of Grievances – Emerging Trends in HR: CSR, Green HR, Work Life Balance (WLB), Computer applications in HRM, HR and Artificial Intelligence (AI).

TOTAL: 60 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the fundamental concept and applications of various HR functions in organizations.

CO2 Apply the process of human resource planning.

CO3 Analyze significance of talent acquisition in organizations and the need to enhance individual talent.

CO4 Apply various techniques For training & executive development towards Work place Productivity.

CO5 Apply the knowledge and skills necessary to manage compensation and performance evaluation within organization.

CO6 Analyze the emerging trends in HR and have effective work life balance.

TEXT BOOKS

1. Decenzo and Robbins, Fundamentals of Human Resource Management, Wiley, 11th Edition, 2013.
2. Gary Dessler, Human Resource Management, Pearson Education Limited, 14th Edition, 2015.
3. Uday Kumar Haldar, Juthika Sarkar. Human Resource Management. Oxford. 2012.
4. Durai, P. (2016). Human Resource Management. New Delhi: Pearson Education.
5. Aswathappa, K. (2010). Human Resource Management – Text & Cases. New Delhi: Tata McGraw Hill.
6. David A. DeCenzo & Stephen P. Robbins, Personnel/Human Resource Management, Third edition, PHI/Pearson, 2006.
7. V.S. P. Rao, Human Resource Management: Text and cases, 3rd Edition, Excel Books, New Delhi – 2010.

REFERENCE BOOKS

1. Luis R. Gomez-Mejia, David B. Balkin, Robert L Cardy. Managing Human Resource. PHI Learning. 2012.
2. Bernardin, Human Resource Management, Tata McGraw Hill, 8th Edition 2012.
3. Wayne Cascio, Managing Human Resource, McGraw Hill, 2007.
4. Ivancevich, Human Resource Management, McGraw Hill 2012.
5. Dr. R. Venkatapathy & Assissi Menacheri, Industrial Relations & Labour Welfare, Adithya Publications, CBE, 2001.
6. Robert L. Gibson and Marianne H. Mitchell, Introduction to Counseling and Guidance, VI Edition, PHI, 2005.
7. John Bernardinl, Human Resource Management: An experiential approach, Special Indian Edition, 2007, Tata McGraw Hill, New Delhi.
8. Deepak Kumar Bhattacharya, Human Resource Management, 2nd Edition, 2006, Excel Books, New Delhi.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	-	-	-	3	2	1	-
CO2	2	-	2	1	2	2	-	-
CO3	-	-	1	-	3	2	2	-
CO4	2	-	2	2	2	-	1	-
CO5	-	-	2	2	3	2	-	-
CO6	2	-	1	1	1	-	2	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3204	OPERATIONS MANAGEMENT	L	T	P	C
		3	1	0	4

COURSE OBJECTIVE:

- To provide awareness on the roles and responsibilities of operations managers in different organizational contexts and understand drivers of operational performance for gaining competitive advantage.
- Acquire knowledge of production planning and resource management.
- Develop capabilities for designing production/service systems.
- Learn to plan, control operations and manage operations.
- To appreciate the prominence of quality to attain global competitive advantage.

UNIT –I INTRODUCTION TO OPERATIONS MANAGEMENT 8

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; case study.

UNIT –II OPERATIONS AND THE VALUE CHAIN 13

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. Supply Chain Management. Case study.

UNIT –III DESIGNING OPERATIONS 15

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

UNIT –IV PLANNING AND CONTROL OF OPERATIONS 15

Demand Forecasting – Need, Types, Objectives and Steps – Overview of Qualitative and Quantitative methods. Operations planning- Resource planning – Inventory Planning and Control. Operations Scheduling- problems and discussions.

UNIT –V QUALITY MANAGEMENT 9

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

TOTAL: 60 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the strategic importance of operations function leading to competitive advantage.

CO2 Understand facility alternatives (location and layout) and the capacity decisions.

CO3 Apply the various methods of Designing products and processes.

CO4 Deduce different plans for the operations

CO5 Apply techniques for forecasting and scheduling of jobs and services.

CO6 Comprehend OM practices to comply with quality standards.

TEXT BOOKS

1. Panneer selvam. R, Production and Operations Management, 3rd Edition, PHI Learning, 2012.
2. Richard B. Chase, Ravi Shankar, F. Robert Jacobs, Operations and Supply Chain Management, McGraw Hill Education (India) Pvt. Ltd, 14th Edition, 2014.

REFERENCE BOOKS

1. Mahadevan B, Operations Management: Theory and practice. Pearson Education India; 2015.
2. William J Stevenson, Operations Management, Tata McGraw Hill, 9th Edition, 2009.
3. Russell and Taylor, Operations Management, Wiley, 5th Edition, 2006.
4. Norman Gaither and Gregory Frazier, Operations Management, SouthWestern Cengage Learning, 9th edition, 2015.
5. Cecil C. Bozarth, Robert B. Handfield, Introduction to Operations and Supply Chain Management, Pearson, 4th Edition, 2016.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	-	2	-	1	-
CO2	2	3	-	-	-	-	2	-
CO3	-	3	-	-	-	-	3	-
CO4	-	-	-	-	-	-	2	-
CO5	2	3	-	-	-	-	-	-
CO6	1	1	-	-	2	-	3	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3205	BUSINESS RESEARCH METHODS	L	T	P	C
		4	0	0	4

COURSE OBJECTIVE:

- To develop understanding of the basic framework of research process.
- To comprehend and apply effective research techniques to solve organization problems.
- To identify various sources of information for literature review and data collection.
- To be equipped with scientific methodology in business inquiry and develop analytics skill in Business Research.
- To present the findings and results for managerial action to gain competitive advantage and stay ahead of competition.

UNIT –I INTRODUCTION 10

Business Research – Definition and Significance – the research process – Types of Research – Exploratory and causal Research – Theoretical and empirical Research – Cross - Sectional and time – Series Research – Research questions/Problems – Research objectives – Research hypotheses – Characteristics – the role of theory in research.

fUNIT -II RESEARCH DESIGN 10

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

UNIT -III DATA COLLECTION 15

Types of data – Primary Vs Secondary data – Methods of primary data collection – Survey Vs Observation – Experiments – Construction of questionnaire and instrument – Types of Validity Sampling plan – Sample size – Determinants of optimal sample size – Sampling techniques – Selection of simple and Random Sampling design - Case studies

UNIT -IV DATA PREPARATION AND ANALYSIS 15

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

UNIT -V REPORT WRITING AND ETHICS IN BUSINESS RESEARCH 15

Report Writing – Types of Report, Layout of Report, Contents of Report - Communication of Research findings - Referencing Format - Reference Management Softwares - Software for paper Formatting, Footnote, – Layout of a Research Paper - Ethics in research – Ethical behaviour of research – Plagiarism check - Plagiarism Deduction - Ethical issues related to publishing Plagiarism - the role of the audience. - Case studies.

TOTAL: 60 PERIODS

COURSE OUTCOME (S):

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

CO1 Explain the various stages of research process and types to solve business problems

CO2 Apply appropriate research design to address a specific research problem

CO3 Apply various measurement scales and instrument construction for a given business situation.
CO4 Analyze appropriate methods to collect qualitative and quantitative data for analysis.
CO5 Application of appropriate statistical tools for managerial decision making and hypothesis testing.
CO6 Design and present the business research report and acknowledge the ethical implications of the research.

TEXT BOOKS

1. Donald R. Cooper, Pamela S. Schindler, and JK Sharma, Business Research methods 11th Edition, Tata Mc Graw Hill, New Delhi, 2012.
2. Uma Sekaran and Roger Bougie, Research methods for Business, 5th Edition, Wiley India, New Delhi, 2012.
3. Kothari CR, Research Methodology Methods and Techniques, New Age International Publishers, 2nd revised Edition, 2004.

REFERENCE BOOKS

1. Alan Bryman and Emma Bell, Business Research methods, 3rd Edition, Oxford University Press, New Delhi, 2011.
2. William G Zikmund, Barry J Babin, Jon C.Carr, AtanuAdhikari,Mitch Griffin, Business Research methods, A South Asian Perspective, 8th Edition, Cengage Learning, New Delhi, 2012.
3. Panneerselvam. R, Research Methodology, 2nd Edition, PHI Learning, 2014.
4. Barbara M. Byrne, Structural Equation Modeling with AMOS – Basic Concepts, Applications, and Programming, Third Edition, Routledge, T&F Group, 2016.
5. David M. Levine et al, ¯Statistics for Managers using MS Excel‟ (6th Edition) Pearson,2010.
6. Robert I. Kabacoff, R in Action - Data Analysis and Graphics with R, Manning Publication Company, New York, 2011.
7. Arnab Kumar Laha, A Note on Test of Normality, IIT Ahmedabad

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	3	-	-	-	-	-	-
CO2	3	-	-	-	3	2	-	2
CO3	3	3	-	-	2	2	-	3
CO4	3	3	-	-	2	3	-	-
CO5	-	2	-	-	-	2	-	-
CO6	3	-	-	-	3	-	-	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3206	BUSINESS ANALYTICS	L	T	P	C
		3	1	0	4

COURSE OBJECTIVE:

- To nderstand the basic concept/fundamentals of business analytics.
- To understand the purpose of using business analysis tools, personnel, data, and technology are needed in starting up a business analytics program within an organization.
- To Understand the importance of measures of Descriptive analytics which includes measures of central tendency, Measures of Dispersion and their implication on Business performance, use the concept of Probability and its usage in various business applications.
- To Understand the practical application of predictive analytics concepts and their uses for Business Analytics.
- To understand the concept of prescriptive analytics allocate resources optimally to take advantage of predictive trends or future opportunity.

UNIT -I INTRODUCTION TO BUSINESS ANALYTICS(BA) 12

Business Analytics-Terminologies, Process, Importance, Evolution of Business Analytics – Scope of Business Analytics, Relationship with Organizational Decision Making, BA for Competitive Advantage. Applications of Business Analytics in functional areas.

UNIT -II MANAGING RESOURCES FOR BUSINESS ANALYTICS 12

Managing BA Personnel, Data and Technology. Organizational Structures aligning BA. Management Issues, Managing Information policy, Outsourcing Business Analytics, Managing Change, data quality and change in BA- case study analysis.

UNIT -III DESCRIPTIVE ANALYTICS 12

Introduction to Descriptive analytics – Data Warehouse – Dashboard –Data Visualization and Exploring Data – Reporting – Descriptive Statistics using excel solver – Sampling and Estimation-Probability Distribution for Descriptive Analytics – case Analysis of Descriptive analytics

UNIT -IV PREDICTIVE ANALYTICS 12

Introduction to Predictive analytics –Logic and Data Driven Models - Predictive Analysis Modeling and procedure using SPSS software – Time Series Analysis and Forecasting – Learning methods – Data Mining- data mining tasks(descriptive and predictive)-case Analysis of Predictive analytics.

UNIT -V PRESCRITIVE ANALYTICS 12

Introduction to Prescriptive analytics-Optimization-Classification of optimization problems – Operations Research Techniques for Analytics, Prescriptive Modeling - Non Linear Optimization – Linear programming – Transportation Problems. LINGO – basics of LINGO – LINGO using prescriptive models – Demonstrating Business Performance Improvement.

TOTAL: 60 PERIODS

COURSE OUTCOME(S):

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

CO1 Ability to understand the role of business analytics in decision making and problem solving to achieve the organizational goal.

CO2 Ability to use analytical tools and technology for to identify business opportunity.

CO3 Ability to apply descriptive analytics for to find new opportunities in organization and solve operational problem.

CO4 Understand predictive analytics and its application for finding future opportunities.

CO5 Knowledge of prescriptive analytics and demonstrating business process improvement and to understand optimal resource allocation for to increase business performance.

CO6 Ability to comprehend the application of business analytics process to identify new opportunity and driving organization decision.

TEXT BOOKS:

1. James R. Evans, "Business Analytics - Methods, Models and Decisions", Pearson Ed, 2012.

REFERENCE BOOKS:

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

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	1	2	-	-	-	1	2	-
CO2	-	3	-	-	-	1	1	-
CO3	1	2	-	-	-	-	2	-
CO4	1	2	-	-	-	1	2	-
CO5	1	2	-	-	-	1	2	-
CO6	2	2	-	-	-	2	1	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3220	DATA ANALYSIS AND BUSINESS MODELING LABORATORY	L	T	P	C
		0	0	4	2

COURSE OBJECTIVE:

- To have hands-on experience on decision modeling, Spreadsheet Software and Data Analysis Tools.
- To develop students' proficiency in utilizing software tools such as SPSS, Excel, and POM (Production and Operations Management) for conducting data analysis and building business models.
- The laboratory aims to provide hands-on experience and practical skills in data analysis
- and business modeling, enabling students to effectively analyze data, derive insights, and make informed business decisions. Investigate data to establish new relationships and patterns.

- To explore and investigate business problems or opportunities through a course of scientific inquiry.

S.No.	Exp.No	Details of experiments Name	Duration
1	1	Descriptive Statistics	4
2	2	Hypothesis–Parametric	4
3	3	Hypothesis-Non-parametric	4
4	4	Correlation & Regression	4
5	5	Forecasting	4
6		- ExtendedExperiment-1	4
7	6	Financial Formulae	4
8	7	Transportation & Assignment	4
9	8	Networking Models	4
10		- Extended Experiment-2	4
11	9	Factor Analysis-EFA&CFA	4
12	10	Structured Equation Modelling	4
13	11	Linear Programming	4
14	12	Inventory Models	4
15		- Extended Experiments-3	4

TOTAL HOURS: 60

COURSE OUTCOME(S):

CO1 Comprehend the nature of data and conducting hypothesis testing using various data analysis techniques.

CO2 Analyze and identify the relationship between variables using data analytical tools.

CO3 Apply the forecasting in real-time business world using analytical tools.
CO4 Analyze to conduct Risk and sensitivity analysis based on business data.
CO5 Ability to conduct portfolio selection based on business data.
CO6 Apply networking, inventory models, and queuing theory using data analytical tools.

TEXT BOOKS

1. David M. Levine et al, ¯Statistics for Managers using MS-Excel ‟ (6th Edition) Pearson, 2010.
2. David R. Anderson, An Introduction to Management Sciences: Quantitative approaches to Decision Making, (13th edition) South-Western College Pub, 2011.
3. Hansa Lysander Manohar, ¯Data Analysis and Business Modeling using MS-Excel‖, PHI Learning private Ltd, 2017.
4. William J. Stevenson, Ceyhun Ozgur, Introduction to Management Science with Spreadsheet ‟, Tata McGraw Hill, 2009.
5. Wayne L. Winston, Microsoft Excel 2010: Data Analysis & Business Modeling, 3rd edition, Microsoft Press, 2011.
6. Discovering Statistics using IBM SPSS Statistics Fifth Edition by Andy Field.
7. Product Management for Dummies 1st edition (January 5, 2017) by Brian Lawley and Pamela Schure.
8. Kiran Pandya and Smriti Bulsari, SPSS in simple steps, Dreamtech, 2011. Barbara M. Byrne, Structural Equation Modeling with AMOS – Basic Concepts, Applications, and Programming, Third Edition, Routledge, T&F Group, 2016.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	1	3	-	-	-	3	-	-
CO2	1	-	-	-	-	3	2	-
CO3	-	3	-	-	-	3	2	-
CO4	-	1	-	-	-	2	-	-
CO5	2	1	-	-	-	3	-	-
CO6	3	2	-	-	-	3	2	-

Internal Assessment		End Semester Examination
Evaluation of Laboratory Observation, Record	Test	Practical
75	25	100
60 %		40%

23MB3221	CASE LABORATORY	L	T	P	C
		0	0	4	2

AN ILLUSTRATIVE LIST OF AREAS (SUBJECT-WISE):

- Introduction to case-method of teaching (What and Why)
- Types of Cases :How to read, analyze and write a Case report
- Identification of case problem/Situation
- Analyzing the case-Approaches
- Participating in class-room case discussion
- Model Case presentation(In team)

Minimum of 5 cases from all 1st & II Semester subjects expect Business Statistics& Analytics for Decision-Making& Quantitative Techniques for Decision Making

EVALUATION PARAMETER:

- Sequence, Clarity, Team Participation, Smooth change over from one speaker to another
- Time Management
- Communication Skills, Confidence Level, Quality of visuals
- Special Features(Creativity)in presentation
- Coordinating & Organising Skills

TOTAL CASES:30 **TOTAL HOURS:60**

COURSE OUTCOME(S):

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

CO1 Ability to ask the right questions, in a given problem situation.

CO2 Grasping of management theory, by providing real-life examples of the underlying theoretical concepts

CO3 Understand the exposure to the actual working of business and other organizations in the real-world.

CO4 Reflect the reality of managerial decision-making in the real-world.

CO5 Understand the ambiguity and complexity that accompany most management issues

CO6 Exhibit the concepts gained to solve the real-time issues.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	-	-	1	2	2	3	1
CO2	2	1	1	3	2	3	3	2
CO3	2	3	2	2	2	2	2	3
CO4	2	-	2	3	3	-	2	-
CO5	1	2	3	2	3	1	1	-
CO6	2	1	2	1	-	3	2	3

Internal Assessment		End Semester Examination
Evaluation of Laboratory Observation, Record	Test	Practical
75	25	100
60 %		40%

23MB3210	ENTREPRENEURSHIP DEVELOPMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- To equip and develop the learners with entrepreneurial skills and qualities essential to undertake business
- To impart the learners entrepreneurial competencies needed for managing business efficiently and effectively.
- To make them aware of the various support services offered by the government and
- the prevailing industrial policies and regulations.
- To make the learners identify the source of product for business and to carry out feasibility studies and to prepare a business plan.
- To create confidence in the learners to have effective management of small business.

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 Regulations.

UNIT -III BUSINESS PLAN PREPARATION 9

Sources of Product for Business - Pre-feasibility Study - Criteria for Selection of Product - Ownership - Capital Budgeting - Project Profile Preparation - Matching Entrepreneur with the Project - Feasibility Report Preparation and Evaluation Criteria - Product Launching – Incubation, Venture capital, Start-ups.

UNIT -IV DIMENSIONS OF ENTREPRENEURSHIP 9

Developing Rural Entrepreneurship – Need, Problems - Technopreneurship - Meaning & importance; Agri-preneurship - Opportunities and Challenges; Social Entrepreneurship – Case Study.

UNIT -V MANAGEMENTOFSMALLBUSINESS 9

Monitoring and Evaluation of Business - Business Sickness - Prevention and Rehabilitation of Business Units - Effective Management of Small Business – Case Study

TOTAL:45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the entrepreneurial competence to run the business efficiently.

CO2 Ability to analyze the various environmental factors influencing business Organization.

CO3 Ability to prepare business plan based on comprehensive knowledge gained

CO4 Ability to evaluate feasibility of business projects and pertaining to various functional areas.

CO5 To analyze the impact of various dimensions of entrepreneurship prevailing in the current scenario

CO6 To monitor and evaluate business performance and construct new paradigms

TEXT BOOKS

1. S.S. Khanka, Entrepreneurial Development, S. Chand and Company Limited, New Delhi, 2016.
2. R.D. Hisrich, Entrepreneurship, Tata McGraw Hill, New Delhi, 2018.

REFERENCE BOOKS

1. Rajeev Roy, Entrepreneurship, Oxford University Press, 2nd Edition, 2011.
2. Donald F Kuratko, T.V Rao. Entrepreneurship: A South Asian perspective. Cengage Learning, 2012.
3. Dr. Vasant Desai, ¯Small Scale Industries and Entrepreneurship‖, HPH, 2006.
4. Arya Kumar. Entrepreneurship, Pearson, 2012.
5. Prasanna Chandra, Projects – Planning, Analysis, Selection, Implementation and Reviews, Tata McGraw-Hill, 8th edition, 2017.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	2	-	-	2	2	2	3
CO2	-	3	-	-	-	-	-	2
CO3	3	-	3	2	3	-	-	-
CO4	-	-	-	-	-	2	3	-
CO5	1	2	2	3	3	2	-	2
CO6	-	2	-	2	-	2	3	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3211	EVENT MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- To provide an introduction to the principles of event management.
- To impart knowledge on the various events and how these events can be organized successfully.
- Learn the process of conceptualizing and designing successful events, including determining event objectives, target audience, themes, and aesthetics.
- Explore event marketing techniques, promotional strategies, and public relations to attract attendees and create buzz around events.
- Gain proficiency in creating and managing event budgets, financial planning, and cost- effective strategies for successful event execution.

UNIT -I EVENT CONTEXT 9

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

UNIT -II EVENT PLANNING & LEGAL ISSUES 9

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

UNIT -III EVENT MARKETING 9

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

UNIT-IV EVENT OPERATION 9

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

UNIT -V SAFETY & EVENT EVALUATION 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend to Learn about structure and code of ethics of events.
CO2 Exploring and getting to know about event planning and regulations.
CO3 Develop an understanding of functional sheets and their importance in project planning and execution.
CO4 Understand about event marketing, planning, and strategies.
CO5 Evaluate professional skills in event management.
CO6 Analyze the safety measure of event management.

REFERENCE BOOKS

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

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	1	3	-	2	2	1	1
CO2	3	1	1	-	2	1	1	1
CO3	1	1	3	-	2	1	1	2
CO4	3	2	3	-	3	1	2	2
CO5	3	1	1	-	1	1	1	-
CO6	2	1	2	-	2	1	-	1

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3212	SUSTAINABLE MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- To provide students with fundamental knowledge of the notion of corporate sustainability.
- 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.
- Examine the importance of social responsibility in sustainable management, Encompassing ethical practices, stakeholder engagement and community involvement.
- Embrace innovation and technology as tools to drive sustainability, such as green product development and clean technologies.
- Introduce sustainability metrics, standards, and reporting frameworks to assess and communicate the performance of sustainable management practices.

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.

UNIT -III SUSTAINABILITYMANAGEMENT:STRATEGIES AND APPROACHES 9

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 SUSTAINABILITYANDINNOVATION 9

Socio-technical transitions and sustainability, Sustainable entrepreneurship, Sustainable pioneers in green market niches, Smart communities and smart specializations

UNIT -V SUSTAINABLE MANAGEMENT OF RESOURCES,COMMODITIES AND COMMONS 9

Energy management, Water management, Waste management.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend sustainability management as an approach to aid in evaluating and minimizing environmental impacts while achieving the expected social impact.

CO2 Analyze the corporate sustainability and responsible Business Practices.

CO3 Knowledge and skills to understand, to measure, and interpret sustainability performances

CO4 Comprehend green engineering principles and practices.

CO5 Summarize the Knowledge of innovative practices in sustainable business and community Management.

CO6 Analyze sustainable management of resources and commodities.

REFERENCE 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.
4. Margaret Robertson, Sustainability Principles and Practice, 2014.
5. Peter Rogers, An Introduction to Sustainable Development, 2006.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	3	2	3	-	1	-	3
CO2	-	2	3	1	-	1	-	2
CO3	2	-	2	3	-	2	-	2
CO4	2	-	3	1	-	1	-	1
CO5	2	1	-	-	-	3	-	-
CO6	2	2	-	-	-	2	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3301	STRATEGIC MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Expose the students to the fundamental concepts of strategy and the process of strategic management.
- Infer the influence of corporate Policies and Governance mechanisms towards business and society.
- Summarize the current trends in the global business environment and relative changes in industry.
- Analyze the importance of having a sustained competitive advantage in the industry.
- Provision of knowledge regarding Selection of various Strategies at the Corporate and Business Level
- Strategic implementation and evaluation with emphasis on Structure and control system

UNIT - I INTRODUCTION 9

Concept of Strategy – Strategic Management Process – Business Definition – Stakeholders of Business - Developing Vision , Mission- Setting Objectives and goals – Strategies and Tactics – Mc Kinsey 7S Framework – Strategic Planning in Practice – Scenario Planning - Strategic Decision Making.

UNIT - II CORPORATE POLICY AND PLANNING IN INDIA 9

Corporate Policy - Importance – Characteristics – Policy Formulation and Development – Types of Business Policies - Implementation of Policies - Corporate Governance – Board of Directors: Role and Functions – Board Functioning – Current trends - Society and Business: Social Responsibility of Business - Ethical Responsibility.

UNIT - III ENVIRONMENTAL ANALYSIS 9

Environmental Scanning – SWOT Audit - External Factors - Industry Analysis – Porter's Five Forces Model – Strategic Groups –Globalization and Industry Structure - Internal Environmental Scanning – Resources- Capabilities and Competencies – Generic Building Blocks of Competitive Advantage- Distinctive Competencies – Durability of Competitive Advantage - sustaining Competitive advantage - Value Chain Analysis.

UNIT- IV TYPES OF STRATEGIES AND TECHNIQUES 9

Strategy in the Global Environment – Entry Mode Strategies - Corporate Strategies – Mergers, Diversification and Integration – Business level strategies – Strategic Analysis and Choice - Corporate Portfolio Analysis – TOWS Matrix- Environmental Threat and Opportunity Profile (ETOP) – Balance Score Card.

UNIT - V STRATEGY IMPLEMENTATION 9

Strategy Implementation – Resource Allocation - Matching Organization Structure to Strategy - Strategic Control Process – Techniques - Du Pont's Control Model – Implementing Strategic change - Power, Politics and conflict – Strategic Issues in Managing Technology and Innovation.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the Strategic management process in business organizations and Influence of stakeholder.

CO2 Analyse the influence of effective governance mechanisms and social responsibility of business

CO3 Interpret the strategic impact of external and internal environmental factors on business and industry

CO4 Examine the impact of current trends in business and estimate the necessity for developing competitive advantage

CO5 Evaluate the strategies at business and corporate level through various tools and techniques

CO6 Appraise suitable control systems required for organizational strategy implementation.

TEXT BOOKS

1. Hill. Strategic Management: An Integrated approach, 2009 Edition Wiley, 2012.
2. John Pearce, Richard Robinson and Amitha Mittal, Strategic Management, McGraw Hill, 12th Edition, 2012

REFERENCE BOOKS

1. John A. Parnell. Strategic Management, Theory and practice Biztantra, 2012.
2. Azhar Kazmi, Strategic Management and Business Policy, 3rd Edition, Tata McGraw Hill, 2008
3. Adriau H. Aberberg and Alison Rieple, Strategic Management Theory & Application, Oxford University Press, 2008.
4. Lawerence G. Hrebiniak, Making strategy work, Pearson, 2nd edition, 2013.
5. Gupta, Gollakota and Srinivasan, Business Policy and Strategic Management – Concepts and Application, Prentice Hall of India, 2005.
6. Dr. DharmaBir Singh, Strategic Management & Business Policy, KoGent Learning Solutions Inc., Wiley, 2012

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	3	-	-	3	-	2	-
CO2	3	3	1	2	-	3	2	-
CO3	2	3	-	3	3	-	2	2
CO4	3	3	3	2	3	3	2	-
CO5	2	-	-	3	-	-	2	3
CO6	-	-	3	-	3	3	3	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3302	INTERNATIONAL BUSINESS MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- To expose students to various facets of international business.
- To ingrain the multinational dimensions in management of International Trade.
- To ascertain the various approaches to global trade and investment.
- To inculcate knowledge about international functions across various domain areas
- To estimate ethical issues and conflict resolution techniques in international business.

UNIT - I OVERVIEW OF INTERNATIONAL BUSINESS 9

Introduction to International Business: Importance, nature and scope –Stages of Internationalisation - International Business Environment: Economic, Political, Cultural and Legal environments - Advantages and disadvantages of international business - Modes of entry into International Business –Trends in Globalization - Effects and Benefits of Globalization.

UNIT - II INTERNATIONAL TRADE THEORIES AND INSTITUTIONS 9

Mercantilism, Absolute Advantage Theory, Comparative Cost Theory, Hecksher - Ohlin Theory- Instruments of Trade Policy- tariff and non-tariff barriers -Voluntary Export Restraints, Administrative Policy, Anti- dumping Policy, Balance of Payment. General Agreement on Tariff and Trade (GATT)- World Trade Organization (WTO) – GATS – UNCTAD – IMF-IBRD- Features and Roles - Regional Trade Blocks

UNIT - III GLOBAL TRADING AND INVESTMENT 9

Theories of Foreign Direct Investment: Product Life Cycle, Eclectic, Market Power theory - Recent Trends in India's Foreign Trade - Export Assistance - Export Finance- Export Processing Zones (EPZs) - Special Economic Zones (SEZs) - Role of EXIM Bank of India- Role of Commodity Boards - Role of State Trading Agencies in Foreign Trade. Foreign Exchange Market - Functions - Foreign Direct Investments (FDI)

UNIT- IV PRODUCTION, MARKETING AND HUMAN RESOURCE MANAGEMENT OF GLOBAL BUSINESS 9

Global production –Location –scale of operations- cost of production – Make or Buy decisions – global supply chain issues – Quality considerations- Globalization of markets, marketing strategy – Challenges in product development , pricing, production and channel management- Selection of expatriate managers - Managing across cultures - Training and development - Compensation

UNIT- V CONFLICT MANAGEMENT AND ETHICS IN INTERNATIONAL BUSINESS MANAGEMENT 9

International business- Sources and types of conflict – Conflict resolutions – Negotiation – Contemporary Issues in International Business- Role of Indian Council of Arbitration / International Chamber of Commerce in solving Trade disputes –Ethical issues in international business – Ethical decision-making.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

Upon completion of the course, students will be able to

CO1: Comprehend the modes of entry into International Business in the competitive global world with functional domain practices
CO2: Application of International Trade theories with adherence to regulations of International Organizations.
CO3: Analyze the various investment theories and current trends in foreign trade
CO4: Estimate the various issues related to global production and marketing while arriving strategic decisions
CO5: Appraise the effectiveness of HR Practices in international organizations
CO6: Evaluate contemporary issues in international business and solving trade disputes.

TEXT BOOKS:

1. Charles W.I. Hill and Arun Kumar Jain, International Business, 6th edition, Tata McGraw Hill, New Delhi, 2010.

2. K. Aswathappa, International Business, 5th Edition, Tata Mc Graw Hill, New Delhi, 2012.

REFERENCE:

1. John D. Daniels and Lee H. Radebaugh, International Business, Pearson Education Asia, 12th Edition,New Delhi, 2010
2. Michael R. Czinkota, Ilkka A. Ronkainen and Michael H. Moffet, International Business, 7th Edition, Cengage Learning, New Delhi, 2010.
3. Rakesh Mohan Joshi, International Business, Oxford University Press, New Delhi, 2009.
4.Vyuptakesh Sharan, International Business, 3rd Edition, Pearson Education in South Asia, New Delhi, 2011.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	2	-	3	2	2
CO2	2	-	-	3	-	2	2	-
CO3	2	3	2	2	2	-	3	2
CO4	3	3	3	2	3	3	2	3
CO5	2	-	-	2	3	2	2	3
CO6	-	3	-	-	3	-	3	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3390	RURAL COMMUNITY ENGAGEMENT	L	T	P	C
		0	0	4	2

OBJECTIVES:

- To provide practical opportunities for students to participate in rural community mobilization, service engagement and empowerment activities.
- To promote preparation of strategies for building resilience and community responding system in nutrition including water, food safety and healthcare.
- To orient the students into Village Development Plans and handling susceptibility of rural communities to impending emergencies arising out of natural and manmade disasters, climate variability.

COURSE CONTENT:

1.	Dynamics of Rural Society: Social, Economic, political and cultural	**6**
2.	Community Goal setting : Inner Engineering	**6**
3.	Participatory Learning and social mapping: Approaches and methods, community project proposal and project management, concept and steps, Thematic maps	**12**
4.	Village development including aspects and process of preparation of village disaster management plan	**6**
5.	Resource Mapping: Natural and Human resource mapping and management	**6**
6.	Rural Institutions: Engagement with school/ street/ Health centre / Panchayat/ SHGs	**6**
7.	Community Awareness: Health & Hygience/ Rights/ Policies & Programmes / Corruption	**6**
8.	Disaster Management: Disaster Preparedness- Risk reduction, Rehabilitation- Physical and Psychological aspects	**6**
9.	Professional Intervention- Partnership with Public, Private and Non-governmental organizations	**6**

TOTAL: 60 PERIODS

COURSE OUTCOMES:

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

1 Understand the social, economic, political and cultural framework of the rural society.

2 Address the challenges with suitable solutions in the identified rural issues.

3 Students will develop a comprehensive understanding of participatory learning as an educational approach that actively involves learners in the learning process.

4 Engage in rural community development programmes.

5 Ability to create community awareness on health and hygiene and disaster management.

6 Knowledge on establishing professional intervention.

REFERENCES:

1. Common core curriculum for Rural Engagement, National council of Rural Institutes, MHRD, GOI.

2. Katarsingh and Anil Shishodia, "Rural development: Principles, Policies and Management", Sage publications , 2016.
3. A Azeez & S.M.J Akhtar, " Rural development in India", Kalpaz publications, 2016.
4. Transforming rural India, Ministry of Rural Development, GOI.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	1	3	-	-	-	3	-	-
CO2	1	-	-	-	-	3	-	-
CO3	-	3	-	-	-	3	-	-
CO4	-	1	-	-	-	2	2	-
CO5	2	1	-	-	-	3	2	-
CO6	3	2	-	-	-	3	-	-

Internal Assessment		End Semester Examination
Evaluation of Field Survey, Project Report	Final Presentation	Practical
75	25	100
60%		40%

23MB3303	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- To develop a comprehensive understanding of investment concepts and explore various investment alternatives.
- Analyze fundamental and technical analysis to determine their impact on investment decision-making.
- Comprehend diversified portfolios that align to varying investor goals and risk Tolerances.
- Apply various portfolio evaluation techniques, assess performance, and improve
  Portfolio efficiency.

UNIT -I INTRODUCTION TO INVESTMENTS **9**

Introduction to investing – Investment vs speculation, investment process, categories. Securities Markets – Functions of markets, primary and secondary markets, Over the Counter Markets and Size of Order. Risk and Return – returns elements, measurement, scientific predicting, Capital Allocation- Introduction to Bonds and its types.

UNIT -II FUNDAMENTAL ANALYSIS **9**

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

UNIT -III TECHNICAL ANALYSIS **9**

Introduction to Technical Analysis: Market Indicators, Types of Charts, Moving Averages. Efficient Market theory: Random Walk, Efficient Market Hypothesis, Empirical tests of Semi strong form.

UNIT-IV PORTFOLIO CONSTRUCTION AND SELECTION **9**

Portfolio analysis: Need and effect of combining securities, Minimum Variance Portfolio, Optimal Risk portfolio. Index Models: single factor and single index models, Treynor-Black and Multifactor Models. Illustration of Portfolio Construction.

UNIT -V CAPITAL MARKET THEORY (CMT) AND MANAGED PORTFOLIOS **9**

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Apply the concept of investment and identify the investment alternatives to investors.

CO2 Summarize nuances of fundamental analyses and technical analyses.

CO3 Comprehend the value of securities.

CO4 Analyze diversified portfolios that align with investor objectives and risk tolerance.

CO5 Apprehend the principles of asset allocation and the benefits of constructing a diversified portfolio

CO6 Apply various methods through which portfolio evaluation could be done.

TEXT BOOKS:

1. Donald E. Fischer & Ronald J. Jordan, Security Analysis & Portfolio Management, PHI Learning, New Delhi, 8th edition, 2011.
2. Punithavathy Pandian, Analysis & Portfolio Management, Vikas publishing house PVT LTD, second edition, 2013.
3. Prasannachandra, Investment analysis and Portfolio Management, Tata McGraw Hill, 2011.

REFERENCES:

1. Reilly & Brown, Investment Analysis and Portfolio Management, Cengage Learning, 9th edition, 2011.
2. S. Kevin, Securities Analysis and Portfolio Management, PHI Learning, 2012.
3. Bodi, Kane, Markus, Mohanty, Investments, 8th edition, Tata McGraw Hill, 2011.
4. V. A. Avadhan, Securities Analysis and Portfolio Management, Himalaya Publishing House, 2013.
5. V. K. Bhalla, Investment Management, S. Chand & Company Ltd., 2012

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	1	2	-	-	3	3
CO2	3	3	2	-	-	-	3	3
CO3	3	3	-	2	-	-	3	3
CO4	3	3	1	-	-	-	3	3
CO5	3	3	-	2	-	-	3	3
CO6	3	3	2		-	-	3	3

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3304	MERCHANT BANKING AND FINANCIAL SERVICES	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- To understand the comprehensive legal and regulatory framework of Merchant Banking Services.
- To Analyze the impact of merchant bankers in the appraisal of projects, designing capital structures, and determining appropriate instruments for issue management
- To acquire knowledge and apply fee based and fund based financial services.

UNIT - I MERCHANT BANKING AND FINANCIAL SERVICES 9

Merchant Banking: Introduction – An Overview of Indian Financial System – Merchant Banking in India – Recent Developments and Challenges ahead – Institutional Structure – Functions of Merchant Bank - Legal and Regulatory Framework – Relevant Provisions of Companies Act -SERA - SEBI Guidelines - FEMA, etc. – Relation with Stock Exchanges and OTCEI

UNIT - II ISSUE MANAGEMENT 9

Issue management: Role of Merchant Banker in Appraisal of Projects, Designing Capital Structure and Instruments – Issue Pricing – Book Building – Preparation of Prospectus – Selection of Bankers – Advertising Consultants etc.- Role of Registrars – Bankers to the Issue, Underwriters, and Brokers – Offer for Sale – Green Shoe Option – E-IPO, Private Placement – Bought out Deals – Placement with FIs, MFs, FIIs, etc. Off-Shore Issues -Issue Marketing – Advertising Strategies – NRI Marketing – Post Issue Activities

UNIT - III FEE-BASED FINANCIAL SERVICES 9

Introduction – Need for Financial Services – Financial Services Market in India – NBFC – RBI framework and Act for NBFC. Fee based financial services: Mergers and Acquisitions -Portfolio Management Services – Credit Syndication – Credit Rating – Insurance Act, 1938 -IRDA – Regulations – Products and services

UNIT- IV FUND-BASED FINANCIAL SERVICES 9

Fund-based Financial Services: Leasing and Hire Purchasing - Basics of Leasing and Hire Purchasing -Financial Evaluation – Mutual Funds

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

Other Fund-based Financial Services: Consumer Credit – Credit Cards – Real Estate Financing – Bills Discounting – Factoring and Forfeiting – Venture Capital

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1. Understand the role and functions of merchant banking in the Indian financial system, including recent developments and regulatory frameworks.

CO2. Evaluate the role of merchant bankers in project appraisal, capital structuring, and issue pricing,

CO3. Examine the post-issue activities and marketing strategies involved in public offerings

CO4. Analyze fee-based financial services such as mergers and acquisitions, portfolio management, credit syndication, and credit rating

CO5. Understand and Gain insights into fund-based financial services

CO6. Summarize the facilitating business operations, and supporting Entrepreneurial ventures.

REFERENCES:

1. Khan, M.Y., Financial Services, McGraw Hill Education (India) Private Ltd., 10th Edition, 2019
2. Rama Gopal, C., Management of Financial Services, Vikas Publishing House Pvt. Ltd., 2014
3. Thummuluri Siddaiah, Financial Services, Pearson Education India, First Edition, 2011
4. Nalini Prava Tripathy, Financial Services, PHI Learning, 2011
5. Machiraju, Indian Financial System Vikas Publishing House, 2nd Edition, 2010
6. J.C. Verma, A Manual of Merchant Banking, Bharath Publishing House, New Delhi
7. Varshney, P.N. & Mittal D.K., Indian Financial System, Sultan Chand & Sons, New Delhi

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	1	-	-	-	2	1	-
CO2	-	3	-	-	-	2	-	-
CO3	2	3	-	-	2	-	2	-
CO4	-	2	-	-	-	3	2	-
CO5	2	2	-	-	-	3	-	-
CO6	-	3	-	-	-	2	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3305	DERIVATIVES MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand the nuances and basic operational mechanisms involved in derivatives.
- To analyze the price movement in the stock market and to give protection against adverse movements in future prices.
- To evaluate various pricing models of stock prices, trading, hedging of options and management of derivative exposure.
- To explore the evolution, regulatory frameworks, and specific contract terminologies related to derivatives markets in India.

UNIT -I INTRODUCTION TO FINANCIAL DERIVATIVES 9

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

UNIT -II FORWARD AND FUTURES CONTRACT 9

Forward contracts – Futures contracts – structure of forward & futures markets - Types of Futures Contracts -Margin Requirements – Marking to Market – Hedging using Futures – Securities, Stock Index Futures, Currencies and Commodities – Delivery Options – Relationship between Future Prices, Forward Prices and Spot Prices

UNIT -III OPTIONS 9

Options - Definition – Exchange Traded Options, OTC Options – Specifications of Options– Call and Put Options – organized options trading – listing requirements – contract size – exercise prices – expiration dates – position & exercise limits - American and European Options – Intrinsic Value and Time Value of Options – Options pricing models

UNIT-IV OPTION PRICING AND SWAPS 9

Principles of Option pricing – Put Call Parity relationship – Option pricing models – The Black Scholes Model – The Binomial model – Principles of forward and future pricing - SWAP – Interest Rate SWAP – Currency SWAP – Valuation of Interest Rate and Currency SWAPs - Bonds and FRNs – Credit Derivatives.

UNIT -V DERIVATIVES IN INDIA 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the good skills in hedging risks using derivatives

CO2 Understand about future contract and options

CO3 Analyze in depth about options and swaps

CO4 Apply pricing models to calculate the theoretical value of currency and futures options.

CO5 Summarize about the evolution of derivative markets

CO6 Develop in depth knowledge about stock options and index futures in NSE

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.

REFERENCES:

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, Derivatives and Risk Management, 2ndt Edition, 2011.
4. David Dubofsky – Option and Financial Futures – Valuation and Uses, McGraw Hill International Edition

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	-	2	-	1	-
CO2	2	3	-	-	-	1	2	-
CO3	-	-	-	-	-	2	-	-
CO4	-	3	-	-	-	-	-	-
CO5	-	-	-	-	-	-	3	-
CO6	2	2	-	-	2	3	2	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3306	FINANCIAL MODELING	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand the concepts of financial modeling and the purpose of using built-in spreadsheet functions in business contexts
- Apply various bond and equity share valuation methods to assess investment opportunities
- Analyze advanced corporate financial modeling and portfolio modeling.
- Evaluate derivatives modelling and its various techniques for investment decision.

UNIT - I INTRODUCTION TO FINANCIAL MODELLING & BUILT-IN FUNCTIONS USING SPREADSHEETS 9

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

UNIT - II BOND & EQUITY SHARE VALUATION MODELLING 9

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

UNIT - III CORPORATE FINANCIAL MODELLING 9

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

UNIT- IV PORTFOLIO MODELLING 9

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

UNIT - V DERIVATIVE MODELLING 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Understand the purpose and importance of financial modelling in various business contexts

CO2 Apply different methods of valuing bonds, including the present value approach and yield-to-maturity approach.

CO3 Analyze the advanced financial modelling techniques used in corporate finance.

CO4 Evaluate advanced financial modeling skills specifically tailored for capital budgeting evaluation.

CO5 Comprehend t h e portfolio management principles and strategies.

CO6 Explore the derivative trading and execution techniques.

TEXT BOOKS:

1. Wayne L Winston Microsoft Excel 2016-Data Analysis and Business Modelling , PHI publications, (Microsoft Press),New Delhi, 2017.
2. Chandan Sen Gupta, Financial analysis and Modelling – Using Excel and VBA , Wiley Publishing House ,2014.

REFERENCES:

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

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	1	-	-	-	2	1	-
CO2	-	3	-	-	-	2	-	-
CO3	2	3	-	-	2	-	2	-
CO4	-	2	-	-	-	3	2	-
CO5	2	2	-	-	-	3	-	-
CO6	-	3	-	-	-	2	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3307	FINTECH AND BLOCK CHAIN APPLICATIONS IN FINANCE	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand the fundamental concepts of financial technology (Fintech) and block chain technology, including their applications and implications in the finance sector.
- Analyze the impact of Fin tech and block chain on traditional financial services, such as banking, payments, lending, and investment, through case studies and real-world examples.
- Analyze the integration of financial technology solutions in wealth management to optimize investment strategies and enhance client wealth accumulation.
- Explore the fundamental concepts of digital currencies such as Crypto currencies and Bitcoin including their creation, transaction processes, and implications for financial systems

UNIT - I FINTECH INDUSTRY AND BANKING TECHNOLOGIES 9

FinTech industry, Global Fintech instruments, Fintech unicorns and startups, new operating models for banking, banking as a service and open Application Programming Interface (API), Challenger banks, Neo-banks, commercial transformation, Impact of FinTech on banking, digital technology on the banking sector – UPI, CBS, Mobile banking, India Stack, Sustainable or green finance.

UNIT - II PAYMENT, DIGITAL LENDING AND INSUR TECH 9

Payments and remittances innovation, social media remittances, Nano payments, Digital Lending, P2P lending, Crowd-funding, Crowd Investing, digital lending for MSMEs, digital mortgages, point of sale evolution, mPOS, mobile wallets, smart credit cards, New Generation Commerce, T-commerce, FinTech and Global Economy. InsurTech, P2P insurance, IoT and Wearable technology in insurance – Cloud computing in insurance – Using Predictive analytics in insurance

UNIT - III WEALTH TECH 9

WealthTech - Innovative wealth management, Social investing - Robo Advisory Services–Robotic Process Automation (RPA) – Algo Trading - Big Data in financial services, Hyper personalization using big data - Cyber security, unique identification system in India, RegTech and SupTech, Internet of Things (IOT) - IOT in Financial services, New age personal finance management, Socially Responsible investing(SRI).

UNIT- IV INTRODUCTION TO BLOCKCHAIN 9

Blockchain, components of Blockchain, public and private keys, Byzantine General Problem, Proof of concept, Blockchain Architecture, Key Blockchain characteristics, Types of Blockchain and its applications, Blockchain distributed ledgers - Impact and Applications of Blockchain in financial services

UNIT - V BLOCKCHAIN AND DIGITAL CURRENCIES 9

Blockchain and new age financial opportunities, Cryptocurrencies, Cryptocurrency Wallets Risks and Costs associated with crypto market investment - Central Bank Digital Currency, Initial Crypto token offerings - Bitcoins- Altcoins - Open Banking Use of Quantum Computing in Finance - Decentralised Finance (DeFi) - FinTech as a Service – Future of Fintech

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

Upon completion of the course, students will be able to

CO1 Comprehend the knowledge of the technological innovations disrupting traditional banking models

CO2 Analyze innovations in payments and remittances, including social media remittances and Nano payments, alongside advancements in digital lending for MSMEs

CO3 Examine innovative wealth management solutions, including robo advisory services and algorithmic trading

CO4 Assess the impact and applications of blockchain in financial services, understanding distributed ledgers

CO5 Comprehend the and the significance of public and private keys in block chain

CO6 Evaluate the intersection of blockchain with digital currencies, including cryptocurrencies, and analyze their implications for the financial industry.

REFERENCES:

1. Peter Borovykh, Blockchain Driven, Blockchain Application in Finance, 2nd Edition, 2018
2. Agustin Rubini, FinTech in a Flash, Financial Technology Made Easy, Banking Innovations 2nd edition, 2017
3. David Kuo ChuenLee and Linda Low, Inclusive FinTech: Blockchain, Cryptocurrency and ICO, World Scientific Publishing, 2018
4. Theo Lynn, John G. Mooney, Pierangelo Rosati & Mark Cummins (Ed), ¯Disrupting Finance: FinTech and Strategy in the 21st Century, Palgrave Macmillan, Studies in Digital Business & Enabling Technologies) Kindle Edition, 1st Edition, 2019
5. Sanjay Phadke, Fintech Future: The Digital DNA of Finance, Sage Publications, First Edition, 2020
6. Seth Swanson, FinTech: For Beginners! Understanding & Utilizing the Power of Financial Technology, Kindle Edition, 2016

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	-	2	-	1	-
CO2	2	3	-	-	-	1	2	-
CO3	-	-	-	-	-	2	-	-
CO4	-	3	-	-	-	-	-	-
CO5	-	-	-	-	-	-	3	-
CO6	2	2	-	-	2	3	2	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3308	APPLICATIONS OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING IN FINANCE	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand the fundamentals of AI and ML, including various types of ML algorithms
- Gain proficiency in R programming for financial analysis and learn about the benefits and impacts of AI/ML on financial business models
- Explore the transformative potential of AI in payments, including leveraging big data and ML methods for optimization
- Understand the importance of trust, ethics, and transparency in AI applications within financial markets

UNIT - I OVERVIEW OF AI AND ML 9

Overview of AI & ML, Types of ML - Future of AI in finance, Data Banks and digital world war. Deposits and Lending: AI in lending, future of deposits and lending, Power of AI to transform the global SME credit landscape, AI for credit assessment in underserved segments, Market micro structure and liquidity: Order - driven and Quote driven markets

UNIT - II AI AND ML APPLICATIONS 9

Introduction to R programming - AI, ML and big data in financial services - benefits and impact of AI/ML on business models of financial sector, Insurance: Using AI in commercial underwriting to drive productivity growth, digitally enabled Underwriter, improving Policy life cycle management with AI and Data Science.

UNIT - III AI AND ML IN PAYMENTS 9

Payments: AI - Next leap forward in the payments revolution, Big Data, AI and ML methods to unlock their potential in the new payment environment. Investment and wealth management: the true value of AI to transform push / pull wealth management. The Impact of AI on ESG investing. Implication for the investment value chain. AI in Indian investment and asset management: Global perspective.

UNIT- IV AI AND ML IN CAPITAL MARKETS 9

Capital Markets: AI approaches in Capital market, AI, ML and the financial services industry. Alternative Data and metaquants: making the most of AI for visionaries in capital market. Trust in FT and AI, building trust through sound governance. AI and business ethics in financial markets, transforming Black Box AI in the financial sector. Explainable AI that is intuitive and perspective, 3 factor Fama and French model

UNIT - V REGULATION OF AI 9

Regulation of AI within the financial services sector, changing face of regulatory compliance and audit. Robocop on Wall Street, technology for regulations and compliance. Future of AI in Finance: An AI embedded finance future, open banking, BC and AI. Automated ML and Federated learning, deep learning and financial regulation. AI trends will shape winning businesses, Governance of AI systems and accountability, AI for ESG investing

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the future implications of AI in finance, including its role in transforming SME credit landscape.

CO2 Understand and Gain proficiency in R programming for financial data analysis

CO3 Analyze the potential of AI in revolutionizing payment systems, leveraging big data and ML methods.

CO4 Evaluate AI approaches in capital markets can include algorithmic trading, portfolio optimization, and risk management

CO5 Comprehend the ethics in financial markets.

CO6 Understanding the Governance of AI systems and accountability

REFERENCES:

1. Ivana Bartoletti, Susanne Chishti, Anne Leslie and Shan Millie, The AI Book – The AI handbook for investors, Entrepreneurs and FinTech Visionaries, Wiley Publications.
2. M. Dixon, I Halperin , P Bilokon, Machine Learning in Finance, Springer, I edition
3. Marcos Lopez, Advances in Financial Machine Learning, Wiley, 1st Edition

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	-	2	-	1	-
CO2	2	3	-	-	-	1	2	-
CO3	-	-	-	-	-	2	-	-
CO4	-	3	-	-	-	-	-	-
CO5	-	-	-	-	-	-	3	-
CO6	2	2	-	-	2	3	2	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3309	BUSINESS ANALYSIS AND VALUATION	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- To understand the financial analysis and valuation techniques of a firm.
- To acquire the analytical skills to assess and value a firm. Gain insight into valuation models for financial analysis and investment decisions.
- To explore M&A strategies, valuation techniques, and post-merger integration.
- To Study valuation methods for assets, investments, goodwill, IP, and liabilities, incorporating the MM hypothesis.

UNIT - I **BUSINESS ANALYSIS – AN INTRODUCTION** **9**

Financial modelling for project appraisal – concept & application – forecasting techniques – financial analysis.

UNIT - II **FINANCIAL ANALYSIS** **9**

Analysis of statement of shareholders equity – analysis of balance sheet and income statement – distress analysis – analysis of cash flow statement – analysis of profitability – analysis of growth and sustainability

UNIT - III **BUSINESS VALUATION** **9**

Basis of valuation – principles and techniques of valuation – role of valuation – valuation models - DCF model – FCF model – relative valuation – contingent claim valuation.

UNIT- IV **VALUATION OF MERGERS AND ACQUISITIONS** **9**

Business strategy – basis of M&A – theories of M&A – synergy in M&A – Approaches to valuation in case of M&A – selection of appropriate cost of capital for M&A for valuation – implications of regulations – Takeover – Post – Merger integration process – shareholder value analysis

UNIT - V **VALUATION OF ASSETS AND LIABILITIES** **9**

Forms of intellectual property and methods of valuation – valuation of fixed assets – valuation of inventories – valuation of investments – valuation of shares – valuation of goodwill, patents, copyrights – valuation of brands – valuation of liabilities – MM Hypothesis.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1. Comprehend the strategy analysis and use it to make proforma statements.

CO2. Apply different valuation methods and tools for assessing their accuracy.

CO3. Summarize Value creation in a merger and acquisition context.

CO4. Analyze the valuation method given the characteristic of a firm and estimate the value of the firm given the chosen method.

CO5. Summarize merger integration process, including the key stages and activities involved.

CO6. Analyze the accounting quality of financial statements and valuation of assets and liabilities.

TEXT BOOKS:

1. Krishna G. Palepu and Paul M. Healy: Business Analysis & Valuation Using Financial Statements, Text Only (PHB) 5th Edition, Cengage Learning 2013.

REFERENCES:

1. Joshua Rosenbaum and Joshua Pearl: Investment Banking: Valuation, Leveraged Buyouts, and Mergers and Acquisitions, John Wiley & Sons; 2nd edition (2013).

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	-	-	-	-	3	1	-
CO2	3	3	-	-	2	-	2	-
CO3	-	1	-	-	-	2	-	-
CO4	2	3	-	-	2	-	3	-
CO5	-	-	-	-	1	3	-	-
CO6	-	3	-	-	-	2	3	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3310	FINANCIAL RISK MANAGEMENT AND INSURANCE	L	T	P	C
		3	0	0	3

OBJECTIVES:

- The course aims to provide students with a comprehensive understanding of risk management principles and practices.
- Students will learn the fundamental concepts and principles of insurance, including the types of insurance products available, the role of insurance in managing risk, and the basic operations of insurance markets.

UNIT - I INTRODUCTION TO RISK MANAGEMENT 9

Risk, Types of Risk, Objective of Risk Management, Sources of Risk, Measurement of Risk

UNIT - II IDENTIFYING AND QUANTIFYING FINANCIAL RISK 9

Risk Identification and Assessment, Risk Response, Risk Control Implementation, Risk Exposure. Quantifying Tools – Regression Analysis, Value at Risk and Scenario Analysis

UNIT - III RISK AVERSION & MANAGEMENT TECHNIQUE 9

Risk Avoidance, Loss Control, Risk Retention, Risk Transfer, Value of Risk Management, Pooling and Diversification of Risk.

UNIT - IV INTRODUCTION TO INSURANCE 9

General Insurance, Principles of General Insurance, General Insurance Products (Fire, Motor, Health), Directors and Officers Liability Insurance, Insurance Contracts, Objective of Insurance, Elements of valid contract, Characteristics of Insurance contracts, Insurance Pricing, Insurance Market & Regulation, Solvency Regulation.

UNIT - V INSURANCE AS A RISK MANAGEMENT TECHNIQUE 9

Insurance Principles, Policies, Insurance cost & Fair Pricing, Expected claim costs, Contractual provisions that limit Insurance coverage, Reinsurance.

TOTAL: 45 PERIODS

OUTCOMES:

1. Summarize the knowledge relating to enterprise risk management concepts.
2. Analyze the Assessment and evaluation of risk management.
3. Summarize various insurance operations in India.
4. Analyze the knowledge relating to various insurance products in India.
5. Apply the various acts regulated insurance business in Indian perspective.
6. Evaluate how the insurance business correlated with enterprise risk management concepts.

TEXT BOOKS:

1. Garcia.F.J.P, “Financial Risk Management: Identification, Measurement and Management”, Springer, 2018.

2. Hull, J. C. “Risk Management and Financial Institutions”, United Kingdom: Wiley, 2018

REFERENCES:

1. McNamara, Michael J, Rejda, George E. “Principles of Risk Management and Insurance”, United States: Pearson Education, 2020.
2. Roncalli,T. “Handbook of Financial Risk Management”, CRC Press, 2020.
3. Schenke.J, “Financial Risk Management Fundamentals”, United States: Amazon Digital Services LLC - KDP Print US, 2019.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	-	-	-	-	3	-	-
CO2	-	3	-	-	2	2	3	-
CO3	2	-	-	-	-	1	-	-
CO4	1	2	-	-	1	2	2	-
CO5	2	-	-	-	-	3	-	-
CO6	2	2	-	-	3	1	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3311	INTERNATIONAL FINANCE	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To understand the International Financial Environment, Management and Risks involved.
- Provide students with a basic knowledge of how mergers andamalgamations work in overseas countries.
- Provide students with an understanding of exchange rates and why currency values fluctuate.
- Explore methods used to manage risk in the global markets.
- Provide an in-depth understanding of the process and techniques used to make international investment decisions.

UNIT - I INTERNATIONAL TRANSACTIONS 9

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

UNIT - II MULTINATIONAL FINANCIAL MANAGEMENT 9

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

UNIT - III INTERNATIONAL MONETARY SYSTEM 9

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

UNIT - IV BORROWING AND LENDING: INTERNATIONAL SOURCESOF FINANCE 9

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

UNIT - V INTERNATIONAL RISK ASSESSMENT AND OTHER INTERNATIONAL MARKETS 9

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

TOTAL: 45 PERIODS

OUTCOMES:

1. Comprehend evolution, process and system of International Finance.

2. Summarize the concepts of international merger and acquisitions,financial techniques and regulations.
3. Apprehend about international monetary system.
4. Gain a comprehensive understanding of the various international sources of finance available to businesses.
5. Analyze ADR, GDR and bond management.
6. Explore the learning in international risk assessment.

TEXT BOOKS:

1. Apte P.G., International Financial Management, Tata McGraw Hill, 2011.

REFERENCES:

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

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	-	-	3	-	2	-	-
CO2	3	1	-	2	-	2	-	-
CO3	2	-	-	1	-	1	-	-
CO4	-	-	-	2	-	2	-	-
CO5	2	3	-	-	-		-	-
CO6	-	2	-	3	-	2	-	-

Internal Assessment				**End Semester Examinations**
Assessment I (100 Marks)		**Assessment II (100 Marks)**		
Individual Assignment / Case Study / Seminar / Mini Project	**Written Test**	**Individual Assignment / Case Study / Seminar / Mini Project**	**Written Test**	**Written Examinations**
40	60	40	60	100
40%				**60 %**

23MB3316	LEARNING AND DEVELOPMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVES:

- Demonstrate the principles of effective learning to create and implement innovative strategies that optimize their learning potential.
- Analyze the comprehensive strategies for Human Resource Development by critically analyzing its role.
- Assess innovative training designs by analyzing the principles of effective training and their influence on achieving desired learning outcomes.
- Evaluate training delivery methods and assess the factors influencing real-world transfer.

UNIT- I LEARNING STYLES AND STRATEGIES 9

Definition of Learning, Learning principles and strategies – Kolb's Learning Styles - Bloom's Taxonomy. Recent developments in Instructional and cognitive psychology. Employee Behaviour – Influencing Internal and External factors.

UNIT -II ROLE ANALYSIS AND TRAINING NEED ANALYSIS 9

Role Analysis: Developing the person in the role, Role Analysis Technique (RAT). Identification of Training Needs: Organizational analysis – Task Analysis – Person analysis – Training Need Analysis: Objectives of training, Benefits, Issues.

UNIT - III DESIGNING TRAINING AND DEVELOPMENT 9

Introduction to Training Design - Training Objectives - Principles of Effective Training Design - Make or Buy Decision in Training Programmes - Selecting and Evaluating Trainers- Preparing Lesson Plans and Training Materials.

UNIT- IV IMPLEMENTING TRAINING AND DEVELOPMENT PROGRAMS 9

Training delivery methods- Trainer capabilities – Training techniques for various employee levels – Skills of an effective trainer – e learning methods and use of technology in training.

UNIT -V EVALUATION AND TRANSFER OF TRAINING 9

Training Evaluation: Purpose –Methods. Donald Kirkpatrick's Evaluation Model- Transfer of training – Transfer process – Issues. Organization and work environmental factors that influence transfer of training – Avoiding common evaluation pitfalls.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the learning styles and models to evaluate the factors affecting employee behaviour.

CO2 Apply role analysis techniques and assess training needs through organizational, task and person analysis to evaluate the effectiveness of training programs.
CO3 Design training programs by setting objectives, applying design principles, and Preparing lesson plans and materials.
CO4 Demonstrate training methods, techniques, and use of technology in delivery.
CO5 Proficiency in evaluating the importance and purpose of training evaluation.
CO6 Analyse the transfer of training process and assess organizational factors that influence it.

TEXT BOOKS:

1. Beevers, K., Rea, A., & Hayden D, ¯Learning and Development Practice in the Workplace, Kogan Page, 2019.
2. De Simone R, L., & Werner, J, M, ¯Human Resource Development, 6th Edition, Cengage learning, 2016.

REFERENCES:

1. Ford, J K, ¯Learning in Organizations- An Evidence-Based Approach, Taylor & Francis 2020. 72
2. Noe, R, Employee Training & Development, 8th Edition, McGraw Hill, 2020.
3. Ross, S C,Training and Development in Organizations - An Essential Guide for Trainer, Taylor & Francis, 2018.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	-	1	1	2	2	1	-
CO2	2	-	1	2	3	1	-	-
CO3	3	-	2	3	2	2	2	-
CO4	1	-	-	3	3	-	-	-
CO5	2	-	2	2	2	1	1	-
CO6	3	-	2	3	-	2	2	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3317	HUMAN RESOURCE ANALYTICS	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- To define and implement HR metrics to effectively apply them in real-world work settings.
- To design methods for evaluating HR KPIs to enhance organizational effectiveness.
- To analyze recruitment metrics and apply them to improve the efficiency and effectiveness.
- To analyze the use of training & development metrics and to assess employee productivity.
- To critically assess employee engagement metrics and career progression in organizations.
- To evaluate common workforce diversity 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. - LAMP framework

UNIT -II HR ANLYTICS 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.

UNIT -III HR ANALYTICS II : TRAINING AND DEVELOPMENT 9

Training & Development Metrics: Percentage of employee trained- Internally and externally trained -Training hours and cost per employee - ROI - Optimizing the ROI of HR Programs - Training Evaluation Models - Kirpatrick and Philips Model

UNIT-IV HR ANALYTICS III : EMPLOYEE ENGAGEMENT AND CAREER PROGRESSION 9

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

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

Workforce Diversity and Development Metrics : Employees per manager - Workforce age profiling - Workforce service profiling - Churn over index - Workforce diversity index - Gender mix – Differently-abled index- Revenue per employee - Operating cost per employeePBT per employee - HR cost per employee- HR budget variance - Compensation to HR cost.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend various HR metrics and develop capability to apply at work settings.

CO2 Evaluate the various HR Key performance indicators in evaluating organizational effectiveness.

CO3 Analyze various metrics of recruitment analytics and apply them to enhance effectiveness in the hiring process.

CO4 Analyze the Training & Development metrics for assessing employee productivity.

CO5 Assess the effectiveness of employee engagement and career progression by using various metrics.

CO6 Evaluate common workforce diversity and development issues and resolving them using people analytics.

TEXT BOOKS:

1. Jac Fitzenz , The New HR Analytics, AMACOM , 2010.
2. Edwards M. R., & Edwards K, Predictive HR Analytics: Mastering the HR Metric. London: Kogan Page.2016.
3. Dipak Kumar Bhattacharyya, HR Analytics, Understanding Theories and Applications, SAGE Publications India, 2017.

REFERENCES:

1. Human Resources kit for Dummies – 3rd edition – Max Messmer, 2012
2. Sesil, J. C., Applying advanced analytics to HR management decisions:
3. Methods for selection, developing incentives, and improving collaboration. Upper Saddle River, New Jersey: Pearson Education, 2014.
4. Pease, G., & Beresford, B, Developing Human Capital: Using Analytics to Plan and Optimize Your Learning and Development Investments. Wiley,
5. 2014.
6. Phillips, J., & Phillips, P.P, Making Human Capital Analytics Work: Measuring the ROI of Human Capital Processes and Outcomes. McGraw- Hill, 2014.
7. HR Scorecard and Metrices, HBR, 20

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	3	-	-	-	-	2	-
CO2	-	-	-	-	3	-	-	-
CO3	-	3	-	-	-	3	3	-
CO4	3	2	3	-	3	3	-	-
CO5	-	-	3	-	-	-	3	-
CO6	-	-	2	-	2	3	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3318	ORGANIZATIONAL DESIGN CHANGE AND DEVELOPMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand and explain organizational design principles and apply them to assess performance and efficiency.
- Apply their understanding of functions and change management to drive successful organizational transformations.
- Evaluate and analyze organizational development principles and its intervention.
- Analyze and apply human relations techniques to improve relationships and organizational evolution.

UNIT -I ORGANIZATIONAL DESIGN 9

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

UNIT -II ORGANIZATIONAL CHANGE 9

Meaning, Nature, Forces for change – change agents – Change process – Types of change.Models of change – Resistance to change – individual factors – organizational factors –techniques to overcome change.

UNIT -III ORGANIZATIONAL DEVELOPMENT 9

Introduction – foundations of OD – Process of OD – Organizational diagnosis – Process – stages – Techniques – Questionnaire, interview, workshop, task-force – collecting, analyzing – feedback of diagnostic information

UNIT-IV OD INTERVENTION 9

Human process interventions – Individual, group and inter – group human relations – structure and technological interventions – 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 and Creativity.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the principles and basic concepts of organization design and structure.

CO2 Apply the knowledge of various functions in order to facilitate successful change.

CO3 Evaluate the foundational principles, theories and techniques in organization development

CO4 Apply the various components including individual, group, and inter-group Human relations techniques, to foster effective relationships and improve organizational dynamics.

CO5 Analyze the various methodologies or strategies to improve inter-group development.

CO6 Create awareness in monitoring and fostering long-term success and adaptability.

TEXT BOOKS:

1. Thomas G. Cummings, Christopher G. Worley: Organisation Development and Change, Thomson Learning.
2. Organizational, Design, and Change–Gareth R. Jones, 5th Edition, Pearson Education.
3. "Organization Development: A Practitioner's Guide for OD and HR"by Mee-Yan Cheung-Judge and Linda Holbeche, Kogan Page.

REFERENCES:

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

ONLINE COURSES / RESOURCES:

1. https://www.futurelearn.com
2. https://instituteod.com
3. https://www.middleearthhr.com
4. https://www.aihr.com/blog/organizational-life-cycle/

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	-	-	-	-	3	3	2
CO2	-	1	-	-	2	3	3	2
CO3	2	-	1	-	-	2	2	-
CO4	-	-	-	-	2	3	3	1
CO5	-	-	3	-	-	3	3	-
CO6	-	2	-	-	-	3	3	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3319	COMPENSATION AND REWARDS MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Evaluate the fundamentals of Compensation Management and Reward Systems, and compensation planning.
- Design and synthesize advanced strategies for Compensation Management and Reward Systems by critically analyzing and evaluating their fundamentals and underlying theories.
- Design and implement performance-related compensation systems and executive sales plans, applying relevant theories for optimal organizational outcomes.

UNIT -I COMPENSATION 9

Types of compensation, conceptual framework of compensation management, Institutional and cultural factors on compensation practices – National differences in compensation –Compensation system design issues: Compensations Philosophies, compensation approaches

UNIT -II COMPENSATION PLANNING 9

Developing total compensation strategy – Competitive Advantage – Job evaluation systems, Compensation structure- Wage and salary surveys, the wage curve, pay grades and rate ranges, preparing salary matrix, fixing pay, significant compensation issues.

UNIT -III VARIABLE PAY 9

Incentive plans - administering incentive plans, individual incentive plans, group incentive plans, team compensation, ESOPs - Managing Employee Benefits: Nature and types of benefits - Security benefits, retirement security benefits, health care benefits, time-off benefits, benefits administration.

UNIT-IV EXECUTIVE COMPENSATION 9

Elements of executive compensation - Executive compensation in an international context, Wage Determination: Principles of wage and salary administration, methods of wage determination in India; internal and external equity in compensation systems

UNIT -V WAGE ADMINISTRATION IN INDIA 9

Wage policy in India, Wage boards: structure, Scope and functions, Pay Commissions. International Compensation, Global convergence of compensation practices - Pay for performance for global employees - practices in different industries, Employee benefits around the world, CEO pay in a global context, Beyond compensation

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Understand the fundamentals of Compensation Management and Reward Systems, including theories and strategies.

CO2 Analyze the economics of the labor market and its impact on employee compensation.

CO3 Analyze the trade-offs involved in employee compensation decisions, considering factors such as salary, benefits, incentives, and non-monetary rewards.

CO4 Manage employee benefits and rewards effectively.

CO5 Implement performance-related compensation systems.

CO6 Design executive and sales compensation plans based on relevant theories and considerations.

TEXT BOOKS:

1. Richard Thrope & Gill Homen: Strategic Reward Systems- Prentice-Hall, 2000.
2. Joseph. J. Martocchio: Strategic Compensation – A Human Resource Management Approach – Prentice-Hall.

REFERENCES:

1. Richard. I. Henderson: Compensation Management in a Knowledge Based World – Prentice Hall, 2007.
2. Reward Management: A Handbook of salary administration by Armstrong, Michael and Marlis, Kogan page business books, 2005.
3. Thomas. P. Plannery, David. A. Hofrichter & Paul. E. Platten: People Performance & Pay – Free Press.
4. Michael Armstrong & Helen Murlis: Hand Book Of Reward Management – Crust Publishing House.
5. Edwarde. E. Lawler III: Rewarding Excellence (Pay Strategies for the New Economy) – Jossey Bass.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	-	-	-	-	3	3	2
CO2	-	1	-	-	-	3	3	2
CO3	2	-	-	-	-	2	2	-
CO4	-	-	-	-	-	3	3	1
CO5	-	-	-	-	-	3	3	-
CO6	-	2	-	-	-	3	3	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3320	EMOTIONAL INTELLIGENCE FOR MANAGERIAL EFFECTIVENESS	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Define emotional intelligence and its components, and examine its importance in personal and organizational contexts.
- Analyze the role of emotions in organizational health and decision-making, and evaluate the impact of emotional intelligence on work performance and leadership.
- Apply emotional intelligence assessment tools, develop emotional competencies, and demonstrate the connection between emotional capital and organizational performance.

UNIT -I INTRODUCTION TO EMOTIONAL INTELLIGENCE 9

Meaning of Emotions- Emotional Intelligence- Importance- Models of Emotional Intelligence Trait EI - Social Intelligence - IQ and EQ - Self Awareness - Social Skills – Relationship Management- EI and Motivation

UNIT -II UNDERSTANDING EMOTIONS 9

The Brain and Emotion - The Relationship of Mood and Emotion - The Role of Emotion in Organizational Health and the Bottom Line - Types of Emotions- Control of Emotions - Gender Differences in Emotion - Impulse Control- Marshmallow Experiment- Negative and Positive Emotions – Emotion and Health

UNIT -III MANAGING EMOTIONS 9

Learning EI – Emotional Self Awareness – EI Assessment Tools - Emotional Intelligence and Psychological Adjustment - Issues in Anxiety, Stress, Depression, Anger, Self Esteem and Self- Management- Empathy

UNIT-IV EI AT WORK PLACE 9

Emotional Intelligence and Decision Making - EI and Personality- Work Frustrations- EI and Work Performance- EI and Leadership - EI and Job Stress – EI and Information Processing -EI and Communication – Goal Conflict – EI and Conflict Resolution – EI and Work Place Diversity -Group EI – EI in Team Building - Star Performers

UNIT -V EMOTIONAL COMPETENCY AND EMOTIONAL CAPITAL 9

Emotional Competence – Emotional Competence Inventory - Bourdieu's Theory of Social Capital – Emotional Capital – Development of the concept – Developing Emotional Capital – Emotional Capital and wellbeing – Emotional Capital and Performance - Organizational Practices.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the importance of EI models

CO2 Apply strategies for controlling emotions, understanding gender differences in emotion, and managing impulse control in various situations.

CO3 Summarize the EI assessment tools for personal and professional growth.

CO4 Evaluate the role of empathy in managing emotions and interpersonal relationships.

CO5 Analyze the impact of EI on decision-making, work performance, leadership effectiveness, and stress management in the workplace

CO6 Analyze strategies for developing emotional capital, and assess its impact on individual well-being, organizational performance, and HR practices for talent management and retention.

REFERENCES:

1. Daniel Goleman, Emotional Intelligence, Bloomsbury Publishing India Private Limited, 25th Anniversary Edition 2020.
2. Rajagopalan Purushothaman, Emotional Intelligence, SAGE Essentials, 2021.
3. Alok Alstorm, Emotional Investment, Strategy and Management, 1st Edition, 2010.
4. Benedicte Gendron, The Power of the Emotional Capital in Education, Executive Functions, Heutagogy, and Mediation/Mindfulness, Sciences, Humaines and Sociales, Psychologie, Connaisance Saviors, 2018.
5. Emotional Intelligence FOCUS, Harvard Business Review Press, 2019.
6. Deepa R, Unearthing your Emotional Intelligence, Notion Press, 1st Edition, 2020.
7. Emotional Intelligence – kEy Readings on the Mayor Salovey Model, Edited by Peter Salovey, Marc.A.Brackette**,** and John D. Mayer, Dude Publishing, 2007.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	-	-	-	-	3	3	2
CO2	-	1	-	-	-	3	3	2
CO3	2	-	-	-	-	2	2	-
CO4	-	-	-	-	-	3	3	1
CO5	-	-	-	-	-	3	3	-
CO6	-	2	-	-	-	3	3	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3321	TALENT MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Define and explain the key concepts of talent management and succession planning, and assess their role and significance in organizational success.
- Analyze the processes involved in talent acquisition and retention strategies, and apply the SMR model to improve employee satisfaction and engagement.
- Evaluate the importance of competency mapping and emotional intelligence in personal and professional development, and design competency models using appropriate tools and frameworks.

UNIT -I INTRODUCTION TO TALENT MANAGEMENT 9

Definition of Talent Management - Objectives & Role - Key Process of Talent Management, Building Blocks of talent management; Source of Talent, Consequences of failure in managing talent, Tools for Managing Talent.

UNIT -II TALENT SUCCESSION PLANNING 9

Succession management process, Integrating succession planning and career planning, designing succession planning program, talent development budget, building a reservoir of talent, compensation management within the context of talent management.

UNIT -III TALENT ACQUISITION AND RETENTION 9

Talent Acquisition- Defining Talent Acquisition, Develop high potential employees, Talent Development Process-Meaning, Steps in developing talent. Talent Retention: SMR Model (Satisfy, Motivate and Reward).Best practices in employee retention.

UNIT-IV COMPETENCY MAPPING 9

Definition of competency mapping; Classification of competencies; Competency mapping procedures, Steps for developing a valid competency model - Goleman's emotional intelligence model, how competencies relate to career development and organizational goals.

UNIT -V METHODS OF COMPETENCY MAPPING AND EMOTIONAL INTELLIGENCE 9

Levels of people capability maturity model, competency mapping tools, competency-based interviewing, validation of competencies; Aspects of emotional intelligence- Self-awareness – Social awareness – Self management – Relationship management.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend and define the concept of talent management and its importance in an organizational context.

CO2 Summarize the concept of succession planning and compensation management.

CO3 Students will be able to analyze the importance of talent acquisition and retention strategies.
CO4 Analyze the concept and steps of competency mapping.
CO5 Students will be able apply the models of competency mapping in organizations.
CO6 Apply and validate the competency Mapping tools

TEXTBOOKS:

1.Lance A. Berger, The Talent Management Handbook, Making Culture a Competitive Advantage by Acquiring, Identifying, Developing, and Promoting th.Best People Tata McGraw Hill, 3rd Edition, 2018
2.Bickham, T, ATD Talent Management Handbook 1st Edition, ATD Press,2015

REFERENCES:

1.Seema Sanghi, The Handbook of Competency Mapping, Sage Publications, 3rd Edition, 2016
2.Edward J Cripe, Competency Development Guide, Workitect Inc., 1st Edition, 2012.
3.Lyle M. Spencer, Signe M. Spencer, Competence at work: Models for Superior Performance, John Wiley Publishing,1st Edition 2008.
4.Rao T.V., Performance Management: Toward Organizational Excellence, SAGE, 2nd Edition, 2015.
5. Sumati Ray Anindya Basu Roy, Competency Based Human Resource Management, SAGE, 1st Edition, 2019.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	3	-	1	2	2	-
CO2	2	1	-	-	-	-	1	-
CO3	2	-	2	-	1	2	2	-
CO4	3	-	-	-	2	1	-	-
CO5	2	2	-	-	1	-	2	-
CO6	2	-	-	-	-	-	3	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3322	PERFORMANCE MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Define performance management concepts and evaluate the characteristics and consequences of a poorly implemented system.
- Apply performance measurement approaches and assess their alignment with business strategy.
- Develop performance plans and evaluate assessment methods to improve employee development and reduce biases.

UNIT-I Introduction to Performance Management 9

Defining Performance – Meaning of Performance Management – Historical Developments - Aims and Role of Performance Management – Contribution of Performance Management – Characteristics of an Ideal Performance Management System - Dangers of Poorly Implemented PMS - Integrating PM with other HR and Developmental Activities

UNIT –II Measurement and PM Cycle 9

Management Process - Approaches to Measuring Performance: Trait, behaviour and Results Approach – Determinants of Performance - Performance Dimensions - Measuring Results: Determining Accountabilities – Objective and Performance Standard – Measuring Behaviours: Comparative System – Absolute system – PM cycle and Linking Performance management with Business Strategy

UNIT -III Performance Planning and Monitoring 9

Theory of Goal Setting – Gathering data pertaining to Performance Criteria – Preparation and Communicating Performance System to employees - Appeals Process. Performance Monitoring – Methods and Techniques – Employee Performance Metrics and use of analytics

UNIT-IV Performance Assessment and Review 9

Evaluating Individual Performance – Different Methods of Appraisals _ Factors affecting Appraisals – Errors – Reducing Rater Biases - Preventing Rating Distortion – Personal Development Plan - Significance of Performance Review and Discussion Process

UNIT -V Managing Team Performance and Employee Development 9

Definition and Importance of Teams – Types of Teams and Implication for Performance Management – Purpose and Challenge of Team performance Management – Rewarding Team Performance – Role of Performance Coaching – Process and Styles.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Summarize the concept and importance of performance management in organizations.

CO2 Apply the performance management cycle and its key components including goal setting, performance planning, monitoring and feedback.

CO3 Analyze skills in creating performance measurement systems that provide meaningful and actionable data.

CO4 Evaluate techniques for aligning individual performance goals with organizational objectives.

CO5 Apply different methods and techniques for assessing and evaluating performance.

CO6 Evaluate the dynamics of team performance and the role of performance management in fostering effective teamwork.

TEXT BOOKS:

1. Aguinis, H, Performance Management for Dummies, John Wiley & Sons, 2019.

2. Armstrong, M, Armstrong's Handbook of Performance Management: An Evidence-based Guide to Delivering High Performance, Kogan PagePublishers, 2009.

REFERENCES:

1. Bacal, R, Performance Management, 2 nd Edition, McGraw Hill Professional, 2012.
2. Herman Aguinis, Performance Management, 3rd Edition, Pearson Education India, 2013

3. Rao, T. V, Performance Management: Toward Organizational Excellence, SAGE Publications India, 2016.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	-	3	-	3	-	3	-
CO2	-	2	-	-	-	-	-	-
CO3	-	-	2	-	2	-	-	-
CO4	3	2	-	-	-	-	3	-
CO5	-	-	-	-	-	-	2	-
CO6	-	3	3	-	3	-	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3323	NEGOTIATION AND CONFLICT MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Acquire practical skills in conflict management techniques and strategies, including effective communication, active listening, and problem-solving.
- Understand and navigate ethical considerations and cultural differences that may arise in negotiation and conflict management processes.

UNIT - I FUNDAMENTALS OF NEGOTIATION 9

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

UNIT - II NEGOTIATION STRATEGIES 9

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

UNIT - III INTRODUCTION TO CONFLICT MANAGEMENT 9

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

UNIT - IV MANAGING INTERPERSONAL, GROUP AND ORGANIZATIONAL CONFLICT 9

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

UNIT - V CONFLICT RESOLUTION AND COST 9

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

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Develop a solid foundation in negotiation theory, encompassing the fundamentals, types, process, and various techniques used in negotiation.
2. Analyze and apply effective strategies and tactics in negotiation to achieve desired outcomes and manage complex situations.
3. Gain a comprehensive understanding of conflict management, including the basics, models, approaches, and the overall process involved in effectively addressing conflicts.

4. Students will be able to analyze and understand the dynamics of conflict distribution within organizations, identifying the sources and patterns of conflicts that impact performance.
5. Explore techniques for managing interpersonal, group, and organizational conflicts, with an emphasis on developing practical skills to navigate and resolve such conflicts.

6. Examine conflict resolution models and assess the costs associated with workplace conflict, emphasizing the importance of proactive conflict resolution strategies for organizational success.

TEXT BOOKS:

1. Managing conflict and negotiation, B.D. Singh, 1st edition, Excel books, 2008.
2. Managing Conflict in Organizations, M. Afzalur Rahim, 4th Edition, Transaction Publishers, 2011, ISBN 1412844258, 9781412844253.

REFERENCES:

1. Negotiation - Lewicki, Saunders, Barry, TMGH, 2014.
2. Corporate Conflict Management - concepts & skills by Eirene Rout, Nelson Omika, PHI, 2007.
3. Negotiation- Communication for diverse settings- Michael Spangle, Sage Publication, 2008.
4. Conflict Management: Practical guide to develop negotiation strategies, Barbara A Budjac Corvette, Pearson Prentice Hall, 2006, ISBN: 8174466428, 9788174466426
5. Negotiation, Harvard Business Essentials, Harvard Business School Press, 2003.
6. How to negotiate effectively, David Oliver, The Sunday Times, Kogan Page, 2010.
7. Conflict Resolution Techniques by Subbulakshmi, ICFAI University press,2005.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	-	2	-	1	-	2	1
CO2	-	-	-	-	-	-	-	-
CO3	2	-	2	-	2	-	3	-
CO4	-	3	-	-	-	-	3	-
CO5	2	-	-	-	3	-	-	3
CO6	-	-	2	2	-	-	3	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3324	INDUSTRIAL RELATIONS AND LABOUR LEGISLATIONS	L	T	P	C
		3	0	0	3

OBJECTIVES:

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

UNIT - I INDUSTRIAL RELATIONS 9

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

UNIT - II INDUSTRIAL CONFLICTS AND LABOUR WELFARE 9

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

UNIT - III LABOUR LEGISLATIONS - I 9

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

UNIT - IV LABOUR LEGISLATIONS - II 9

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

UNIT - V LABOUR LEGISLATIONS - III 9

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

TOTAL: 45 PERIODS

COURSE OUTCOMES:

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

CO1 Summarize the concept of industrial relations as the study of relationships and interactions between employers, employees, and their representatives in the workplace.

CO2 Apply the key provisions and objectives of the Industrial Disputes Act,1947 in regulating industrial disputes and promoting industrial peace.

CO3 Analyze the concept of statutory welfare measures mandated by labor laws to ensure the well-being of workers.

CO4 Apply the concepts of Labour legislation and legal provisions for factory workers,wages and Bonus.

CO5 Evaluate provisions for equal remuneration, gratuity, compensation, industrial employment and Apprenticeship

CO6 Analyze the Legal provisions for EPF, ESI, Maternity, contract labours, and child labour prevention.

TEXT BOOKS:

1. Mamoria C.B. and Sathish Mamoria, Dynamics of Industrial Relations, Himalaya Publishing House, New Delhi, 2016.
2. Kapoor N. D, Elements of Mercantile Law, Sultan Chand, 2014.
3. Srivastava, Industrial Relations and Labour laws, Vikas, 2015.

REFERENCES:

1. Arun Monappa, Ranjeet Nambudiri, Patturaja Selvaraj. Industrial relations & Labour Laws. Tata McGraw Hill, 2012.
2. P.K. Padhi, Industrial Laws, PHI, 2017.
3. P.R.N Sinha, Indu Bala Sinha, Seema Priyardarshini Shekhar. Industrial Relations, Trade Unions and Labour Legislation. Pearson, 2017.
4. Tax Mann, Labour Laws, 2018.
5. P.N.Singh, Neeraj Kumar. Employee relations Management. Pearson. 2011.
6. Ratna Sen, Industrial Relations in India, Shifting Paradigms, Macmillan India Ltd., New Delhi, 2007.
7. C.S.Venkata Ratnam, Globalisation and Labour Management Relations, Response Books, 2007.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	3	-	-	-	2	-	-
CO2	-	3	-	2	-	3	1	-
CO3	3	-	-	-	-	-	-	-
CO4	2	3	-	-	-	3	-	1
CO5	1	-	3	-	-	-	2	-
CO6	-	2	-	-	-	3	-	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3326	DIGITAL MARKETING	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand the core functions, key metrics, and essential skills in digital marketing, and apply them to adapt to the rapidly evolving business environment
- Implement search engine optimization (SEO) strategies to improve online visibility, organic traffic, and brand recognition in digital marketing efforts
- Apply email marketing strategies and techniques to enhance business performance by improving customer engagement, optimizing segmentation, and increasing conversion rates.
- Evaluate and leverage mobile marketing technologies, including mobile advertising, mobile apps, and website optimization, to maximize brand visibility and customer interaction across mobile platforms.

UNIT -I INTRODUCTION 9

Online Market space- Digital Marketing Strategy- Components -Opportunities for building Brand Website - Planning and Creation- Content Marketing - Recent trends in Digital marketing

UNIT -II SEARCH ENGINE OPTIMISATION 9

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

UNIT -III E-MAIL AND MOBILE MARKETING 9

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

UNIT-IV SOCIAL MEDIA MARKETING 9

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

UNIT -V DIGITAL ANALYTICS 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the functions and metrics of digital marketing and its skills in today's rapidly changing business environment

CO2 Apply the strategies and skills of search engine optimization and its significance in digital marketing

CO3 Apply the concepts of email marketing and various techniques in digital marketing

for improve business performance.

CO4 Analyze various components and technologies of mobile marketing including mobile advertising, mobile apps and mobile website optimization to enhance brand visibility and customer engagement.

CO5 Analyze different social media platforms and their unique features, audience demographics and best practices for marketing purposes.

CO6 Evaluating the concept of digital analytics tools and technologies for implementing business practices.

TEXT BOOKS:

1. Ryan, D. (2014). Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation, Kogan Page Limited
2. Fundamentals of Digital Marketing by Puneet Singh Bhatia; Publisher: Pearson Education; First edition (July 2017); ISBN-10: 933258737X; ISBN-13: 978-9332587373

REFERENCES:

1. Digital Marketing by Vandana Ahuja ; Publisher: Oxford University Press (April 2015) ISBN-10: 0199455449; ISBN-13: 978-0199455447
2. Marketing 4.0: Moving from Traditional to Digital by Philip Kotler; Publisher: Wiley; 1st edition (April 2017); ISBN10: 9788126566938; ISBN13: 9788126566938; ASIN: 8126566930
3. Pulizzi, J Beginner's Guide to Digital Marketing , McGraw Hill Education.
4. Barker, Barker, Bormann and Neher (2017), Social Media Marketing: A Strategic Approach, 2E South-Western , Cengage Learning

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	3	1	2	-	1	2	-
CO2	-	1	2	-	3	2	1	-
CO3	2	2	2	1	2	3	2	-
CO4	2	3	-	2	-	2	2	2
CO5	-	1	2	-	2	3	-	2
CO6	1	-	-	3	-	-	2	1

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3327	MARKETING ANALYTICS	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand the scope and application of marketing analytics across various industries and how they contribute to business decision-making.
- Apply descriptive, predictive, and prescriptive analytics methodologies to interpret and analyze data for strategic insights.
- Apply customer data, sales data, and market research findings to formulate actionable marketing strategies that drive business growth.
- Analyze and evaluate tools for customer segmentation, value analysis, and web analytics to enhance marketing strategies and optimize decision-making processes.

UNIT -I INTRODUCTION TO MARKETING ANALYTICS 9

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

UNIT -II DATA MANAGEMENT 9

Exploring Data; Frequencies; Descriptive Statistics Cross tabulations; Independent Samples t-Test; One-Way ANOVA Simple Regression and Correlation, Multiple Regression to Forecast sales, Modeling 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, Customer Lifetime Value-Conjoint Analysis.

UNIT-IV METRICS AND MEASUREMENTS 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

COURSE OUTCOME(S):

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

CO1 Comprehend the extent and utilization of marketing analytics in diverse sectors

CO2 Describe data through descriptive, predictive and prescriptive analytics methodologies

CO3 Apply customer data, sales data, and market research findings to provide actionable solutions

CO4 Analyse various tools for customer segmentation and value analysis

CO5 Evaluating the principles and techniques of product and price analytics, retailing analytics and advertising analytics

CO6 Apply web analytics data to pinpoint opportunities for enhancement and guide marketing decisions based on data-driven insights

TEXT BOOKS:

1. Sorger, Stephan. ¯Marketing Analytics: Strategic Models and Metrics. Admira Press/ Create Space, 2013
2. Grigsby, M. (2015). Marketing Analytics: A Practical Guide to Real Marketing Science. Kogan Page Publishers.

REFERENCES:

1. Evans, J.R. (2012). Business analytics methods, models and decisions. New Jersey: Pearson, Upper Saddle River.
2. Cases and Data Sets for Hands on Learning. Pearson Education
3. Sathi, A. (2014). Engaging customers using big data: how Marketing analytics are transforming Business. Palgrave Macmillan.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	-	-	-	1	-
CO2	2	3	-	2	-	1	2	-
CO3	2	3	-	3	-	-	2	2
CO4	-	3	-		-	2	3	2
CO5	2	2	-	2	-	3	1	-
CO6	2	3	-	2	-	2	2	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3328	INTEGRATED MARKETING COMMUNICATION	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Summarize and analyze the communication strategies of a company or brand, and apply marketing communication theories to design an effective Integrated Marketing Communication (IMC) program.
- Analyze and formulate IMC objectives, create strategic budgets, and design media strategies and creative messages to effectively reach and engage target audiences.
- Evaluate the impact of digital advancements in online promotion, ensuring marketing practices adhere to social, ethical, and legal standards while creating brand awareness through impactful marketing campaigns.

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

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

UNIT -II UNDERSTANDING COMMUNICATION PROCESS 9

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

UNIT -III PLANNING FOR MARKETING COMMUNICATION (MARCOM) 9

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

UNIT-IV DEVELOPING THE INTEGRATED MARKETING COMMUNICATION PROGRAMME 9

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

UNIT -V COMMUNICATION MASSAGE THROUGH DIGITAL MEDIA & ADVERTISING 9

Digital Media, Evolution of Technology, Convergence of Digital Media, E- Commerce and Digital Media, Advertising on Digital Media, EPR Advertising Laws & Ethics: Adverting & Law, Advertising & Ethics

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Summarise the communication plan of any Company/brand.

CO2 Apply Marketing Communication Theories to design IMC program.

CO3 Analyse and formulate effective IMC objectives and design a strategic budget.

CO4 Apply appropriate media strategy and creative messages and concepts to reach the target audience.

CO5 Analyze advancements in digital technology (online promotion) with socially and ethical responsibility in accordance to laws.

CO6 Creating brand awareness by developing and executing marketing campaigns

TEXT BOOKS:

1. Advertising & Promotion- An Integrated Marketing Communications Perspective George Belch, Michael Belch & Keyoor Purani, TATA McGraw Hill 8th edition.

REFERENCES:

1. Wells, Moriarty & Burnett, Advertising, Principles & Practice, Pearson Education 7thEdition, 2007
2. Kenneth Clow. Donald Baack, Integrated Advertisements, Promotion and Marketing communication, Prentice Hall of India, New Delhi, 3rd Edition, 2006.
3. Terence A. Shimp and J. Craig Andrews, Advertising Promotion and other aspects of Integrated Marketing Communications, CENGAGE Learning, 9th edition 2016
4. S. H. H. Kazmi and Satish K Batra, Advertising & Sales Promotion, Excel Books New Delhi, 3rd Revised edition, 2008.
5. Julian Cummings, Sales Promotion: How to Create, Implement and Integrate Campaigns that Really Work, Kogan Page, London, Fifth Edition Edition, 2010.
6. Jaishri Jefhwaney, Advertising Management, Oxford University Press, 2ndEdition

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	**3**	**3**	**1**	**-**	**-**	**3**	**3**	**-**
CO2	**3**	**-**	**-**	**-**	**3**	**-**	**3**	**-**
CO3	**2**	**-**	**3**	**-**	**3**	**3**	**2**	**-**
CO4	**3**	**2**	**3**	**-**	**3**	**-**	**3**	**-**
CO5	**2**	**-**	**-**	**-**	**3**	**-**	**1**	**-**
CO6	**3**	**2**	**2**	**-**	**-**	**1**	**3**	**-**

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3329	CUSTOMER RELATIONSHIP MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand and apply the role of CRM and customer lifecycle management across both B2B and B2C contexts to improve business operations and customer relationships.
- Analyze the customer funnel and assess the significance of customer satisfaction and loyalty in driving business success, using customer analytics to guide data-driven decision-making.
- Evaluate and select appropriate CRM software platforms based on organizational needs and requirements, ensuring the alignment of technology with business goals and customer engagement strategies.

UNIT -I CUSTOMER CENTRICITY 9

CRM – Need for CRM – Benefits of CRM – CRM in the digital age - Customer Centricity – Characteristics of customer centric companies – Developing a customer centric company

UNIT -II CUSTOMER EXPERIENCE 9

Customer Lifecycle – Managing Customer Experience in B2B and B2C - Understanding Customer Journey – Customer Journey Mapping – Customer funnel - Managing customer funnel for better customer experience – Customer onboarding – Onboarding process - Personalization vs. Hyper Personalization- Ways to Hyper personalize

UNIT -III CUSTOMER ANALYTICS 9

Customer Churn – Customer Acquisition Cost – Revenue Churn – Customer life time value – Recency, Frequency and Monetary – Customer Profitability Analysis

UNIT-IV CUSTOMER SATISFACTION & LOYALTY 9

Net Promoter Score – Customer Happiness Index (CHI) – Customer Effort Score – Customer Loyalty and Measuring customer loyalty – Exploring loyalty and profitability relationship – Analyzing loyalty programs effectiveness - Marketing Automation for better
customer engagement and retention

UNIT -V CONTEMPORARY TOOLS FOR CRM 9

Sales force automation – Journey Orchestration – Process management - Sales enablement – Performance management – Predictive sales – Omni-channel – Team collaboration

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the role & implications of CRM in business
CO2 Apply the concept of customer lifecycle management and its significance in both B2B and B2C contexts
CO3 Analyze customer funnel and understand its role in guiding customers through the purchasing process.

CO4 Evaluate the importance and applications of customer analytics in driving data-driven decision making and improving business performance

CO5 Analyze the significance of customer satisfaction and loyalty in business success and growth.

CO6 Evaluate and select appropriate CRM software platforms based on organizational needs and requirements

REFERENCES:

1. Francis & Stan Maklan Buttle, ―Customer Relationship Management Concepts and Technologies‖, Routledge, 4th Edition, 2019.
2. Jagdish N Sheth , Parvatiyar Atul, G Shainesh, ―Customer Relationship Management Emerging Concepts Tools & Applications‖, McGraw Hill, 2017
   Lars Helgeson, CRM for Dummies‖, Wiley Publication, 2017
4. Paul Greenburg, CRM at the Speed of Light‖, Tata McGraw Hill, 4th edition 2017
5. Peter Fader and Sarah Toms, ―The Customer Centricity Playbook‖, The Wharton Press, 2018.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	1	2	-	-	2	-	-	-
CO2	-	2	-	-	-	1	2	-
CO3	-	-	2	-	-	2	-	2
CO4	2	-	-	-	1	-	-	-
CO5	-	2	-	-	-	-	2	-
CO6	1	1	-	-	2	2	1	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3330	RETAIL MARKETING	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand and apply key concepts, theories, and techniques in retail management to address industry challenges and opportunities, including store location, brand building, and pricing strategies.
- Analyze and apply principles of visual merchandising, inventory management, and consumer behavior to create effective store layouts, optimize retail operations, and predict shopper motivations and preferences.
- Evaluate the decision-making process in retail management, focusing on supply chain management, category management, and the selection of appropriate retail formats to enhance business performance.

UNIT -I INTRODUCTION 9

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

UNIT -II RETAIL FORMATS 9

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

UNIT -III RETAILING DECISIONS 9

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

UNIT-IV RETAIL SHOP MANAGEMENT 9

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

UNIT -V RETAIL SHOPPER BEHAVIOUR 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the conceptual frameworks, theory and techniques to various concepts related to retail management

CO2 Apply understanding of various retail formats as well as of the opportunities and challenges that are faced by the retail industry

CO3 Apply the decision making process in the areas of store location, brand building, pricing, supply chain management and category management

CO4 Apply principles of visual merchandising to create appealing and effective store layouts and displays.

CO5 Analyze knowledge of inventory management techniques and their importance in retail operations.

CO6 Analyze and interpret consumer behavior and predict shopper motivations and preferences.

TEXT BOOKS:

1. Chetan Bajaj, Rajnish Tow and Nidhi V. Srivatsava, Retail Management, Oxford University Press, 2007.

2. Swapna Pradhan, Retail Management -Text and Cases, Tata McGraw Hill, 3rd Edition, 2009.

REFERENCES:

1.Michael Havy, Baston, Aweitz and Ajay Pandit, Retail Management, Tata Mcgraw Sixth Edition, 2007

2.Ogden, Integrated Retail Management, Biztantra, India, 2008.

3 .Patrick M. Dunne and Robert F Lusch, Retailing, Thomson Learning, 4th Edition 2008

4.Dunne, Retailing, Cengage Learning, 2nd Edition, 2008

5.Ramkrishnan and Y.R.Srinivasan, Indian Retailing Text and Cases, Oxford university Press, 2008.

6.Dr. Jaspreet Kaur , Customer Relationship Management, Kogent solution.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	3	1	2	-	1	2	-
CO2	-	1	2	-	3	2	1	-
CO3	2	2	2	1	2	3	2	-
CO4	2	3	-	2	-	2	2	2
CO5	-	1	2	-	2	3	-	2
CO6	1	-	-	3	-	-	2	1

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3331	CONSUMER BEHAVIOR	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand and examine consumer behavior theories, concepts, and models, and assess their influence on consumer decision-making, considering both internal factors and external influences such as socio-cultural and reference groups.
- Apply knowledge of consumer behavior, including internal influences, socio-cultural factors, and communication impacts, to develop effective targeted marketing strategies that align with consumer decision-making processes.
- Evaluate the relevance and applicability of traditional consumer behavior models in different contexts, such as individual and industrial buying behavior, to develop informed marketing strategies and apply decision-making rules.

UNIT -I INTRODUCTION 9

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

UNIT -II INTERNAL INFLUENCES 9

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

UNIT -III EXTERNAL INFLUENCES 9

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

UNIT-IV CONSUMER BEHAVIOR MODELS 9

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

UNIT -V PURCHASE DECISION PROCESS 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

- **CO1** Comprehend about consumer behavior theories, concepts and models.
- **CO2** Analyze the impact of consumer orientation of consumer decision-making and behavior
- **CO3** Apply the different internal influences that shape consumer behavior.
- **CO4** Analyze the socio, cross-cultural, family group, reference group, communication influences that shape consumer behavior
- **CO5** Evaluate the applicability of traditional consumer behavior models in different contexts, including individual and industrial buying behavior
- **CO6** Apply knowledge of steps, levels and decision rules to develop targeted marketing strategies and facilitate consumer decision making

TEXT BOOKS:

1. Leon G.Schiffman and Leslie Lasar Kanuk, Consumer Behavior, Pearson Education, India, 9e, 2010.

2. Paul Peter et al., Consumer Behavior and Marketing Strategy, Tata McGraw Hill Indian Edition, 7e, 2005.

REFERENCES:

1. Ramanuj Majumdar, Consumer Behaviour - Insights from Indian Market, PHI, 2010.
2. Barry J.B., Eric G.H., Ashutosh M., Consumer Behaviour - A South Asian Perspective, Cengage Learning, 2016

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	3	1	2	-	1	2	-
CO2	-	-	2	-	2	2	-	-
CO3	-	2	2	1	2	3	2	-
CO4	2	-	-	-	-	-	2	2
CO5	-	1	2	-	2	-	-	2
CO6	1	2	-	3	-	-	2	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3332	BRAND MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Comprehend the core concepts of branding, including brand equity, brand image, and competitive advantage, and apply strategies for strategic brand positioning and brand building programs.
- Examine the elements that contribute to brand identity, brand loyalty, and brand image, and analyze the value of brand leveraging using relevant brand valuation methods.
- Apply global brand strategies and evaluate branding practices at the international level, focusing on industrial and retailer brands to promote brand success globally.

UNIT -I INTRODUCTION TO BRANDING 9

Definition of Brand - Importance of Brands – Branding Challenges and Opportunities - Brand Equity Concept – Brand Equity Models – Kepler Brand Identity Model - Brands vs. Products Constituents of a Brand: Brand Elements – Brand Identity - Image and Personality – Brand DNA, Kernel, Codes and Promises – Point of Distribution and Point of Purchase

UNIT -II BRAND POSITIONING 9

Basic Concepts – Risks – Brands and Consumers – Competitive Advantage through Strategic Positioning of Brands - Points of Parity -Points of Difference -Brand Building: Designing Marketing Programmes to Build Brands - Role of Social Media in Brand Building – Managing and Sustaining Brands Long-Term.

UNIT -III BRAND IMAGE 9

Image Dimensions, Brand Associations & Image, Brand Identity; Perspectives, Levels and Prisms. Managing Brand Image – Stages – Functional, Symbolic and Experiential Brands – Brand Audits – Brand Loyalty – Cult Brands

UNIT-IV BRAND VALUATION 9

Methods of Valuation – Implications for Buying & Selling Brands. Leveraging Brands: Brand Extension – Brand Licensing – Co-branding – Brand Architecture and Portfolio Management

UNIT -V BRANDING IN PRACTICE 9

Handling Name Changes and Brand Transfer – Brand Revitalisation and Rejuvenation - Global Branding Strategies – Building and Managing Brands Across Boundaries – Branding Industrial Products, Services and Retailers – Building Brands Online – Indianisation of Foreign Brands and Taking Indian Brands Global

TOTAL: 45 PERIODS

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

CO1 Comprehend the core concepts and key elements of Branding that helps to build brand

equity and brand image of the products.

CO2 Analyze competitive advantage through strategic positioning of brands and designing brand building programs

CO3 Examine the elements that create brand identity for the products and enhancing the brand image and brand loyalty among the buyers.

CO4 Analyze brand leveraging value of the product by applying relevant brand valuation methods.

CO5 Apply global brand strategies by having better understanding towards industrial, retailer brands and thereby promoting brands at global level.

CO6 Analyze the Branding Practice at International Level

REFERENCES:

1. Keller, K.L., Strategic Brand Management, 3rd Edition, Pearson, 2011
2. Chevalier, M. and Mazzalovo, G., Luxury Brand Management: A World of Privilege, 2nd Edition, John Wiley and Sons, 2012
3. Aaker, D., Building Strong Brands, Simon & Schuster, 2010.
4. Dutta, K., Brand Management: Principles and Practices, Oxford University Press, 2012.
5. Kapferer, J.N., The New Strategic Brand Management: Advanced Insights and Strategic Thinking, 5th Edition, Kogan Page, 2012

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	3	1	2	-	1	2	-
CO2	-	-	2	-	2	2	-	-
CO3	-	2	2	1	2	3	2	-
CO4	2	-	-	-	-	-	2	2
CO5	-	1	2	-	2	-	-	2
CO6	1	2	-	3	-	-	2	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3333	SERVICES MARKETING	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Comprehend the differences between services and tangible products, and analyze the challenges and issues involved in services marketing, considering the unique aspects of service delivery.
- Assess service market potential and classify various service types, utilizing an expanded market mix to optimize marketing strategies and meet customer needs effectively.
- Apply service life cycle concepts, blueprints, and the SERVQUAL analysis to enhance customer satisfaction and improve overall business performance in service-based industries.
- Analyze effective service delivery systems, positioning strategies, and strategic pricing methods, while integrating communication strategies to manage demand and supply in service marketing

UNIT -I INTRODUCTION 9

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

UNIT -II SERVICE MARKETING OPPORTUNITIES 9

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

UNIT -III SERVICE DESIGN AND DEVELOPMENT 9

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

UNIT-IV SERVICE DELIVERY AND PROMOTION 9

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

UNIT -V SERVICE STRATEGIES 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 comprehend the difference between services and tangible products and addresses the challenges and issues in services marketing.
CO2 Assess the service market potential and classify various types of services, utilizing an expanded market mix.
CO3 Apply service life cycle, blueprints and SERVQUAL analysis to enhance customer satisfaction and business performance.
CO4 Analyze proficiency in positioning services, designing effective service delivery system and implement strategic pricing methods.
CO5 Analyze service marketing triangle, managing demand and supply and execute service marketing in integrating communication.
CO6 Analyze and gain expertise in tailoring service marketing approaches to the unique needs and dynamics across sectors.

TEXT BOOKS:

1. Christropher H. Lovelock and Jochen Wirtz, Services Marketing: People, Technology, strategy Pearson Education, New Delhi,8th edition, 2016.
2. R. Srinivasan, SERVICES MARKETING, Prentice Hall of India Private Limited, 4th Edition 2014, New Delhi.

REFERENCES:

1. John. E.G. Bateson, K. Douglas Hoffman, Services Marketing, South Western Cengage learning, 4th Edition, 2011.
2. Valarie Zeithaml et al, Services Marketing, 5th International Edition, Tata McGraw Hill, 2007.
3. Vinnie Jauhari & Kirti Dutta (2017), Services Marketing, Text and cases, 2nd edition.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	2	-	3	2	1
CO2	-	2	2	2	-	3	2	-
CO3	2	3	2	-	-	2	3	-
CO4	2	2	2	-	-	3	2	2
CO5	-	3	3	-	2	3	1	-
CO6	2	2	1	3	2	3	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3334	SALES AND DISTRIBUTION MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Students will develop a clear understanding of the sales and distribution management function and its significance in achieving organizational goals.
- Explore the importance of sales territories and quotas in sales management
- Gain knowledge of distribution channels and their role in delivering products and services to customers

UNIT - I INTRODUCTION 9

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

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

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

UNIT - III MANAGING THE SALES FORCE 9

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

UNIT - IV MANAGING DISTRIBUTION CHANNELS 9

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

UNIT - V BASICS OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT 9

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

TOTAL: 45 PERIODS

OUTCOMES:

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

CO1. Comprehend about the key concepts, principles, and practices involved in Managing sales and distribution channels effectively

CO2. Apply about the personal selling process and its role in generating sales revenue.

CO3. Analyze about sales quotas, their purpose, and the process of setting and evaluating sales targets for individual sales representatives.

CO4. Apply recruitment, selection, training, and motivation of salespeople.

CO5. Analyze channel design, selection, and management strategies to ensure efficient and effective product distribution.

CO6. Apply the fundamentals of logistics and supply chain management.

TEXT BOOKS:

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

REFERENCES:

1. Gupta S.L., Sales and Distribution Management - Text and Cases - An Indian Perspective, Excel Books, 2008.
2. Venugopal, Sales and Distribution Management - An Indian Perspective, ResponseBooks from Sage Publications, 2008.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	-	1	2	-	1	-	-
CO2	-	1	-	-	3	2	1	-
CO3	2	-	2	1	2	-	-	-
CO4	2	-	-	2	-	2	2	2
CO5	-	1	2	-	3	-	-	-
CO6	2	-	-	-	-	-	-	1

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3336	PROJECT MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand interpersonal and technical skills that project managers need to lead project teams and manage the projects effectively.
- Students will be able to decide basic project scheduling techniques.
- Students will be able to interpret and devise objective measures and metrics to ascertain project progress and performance.
- Students will be able to evaluate project performance and risk management.

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UNIT -I INTRODUCTION TO PROJECT MANAGEMENT 9

Project Management – Definition –Goal - Lifecycles. Project Environments .Project Manager – Roles- Responsibilities and Selection. Definition and examples of projects, Key features of projects, Typical project problems, Human issues in Projects, Project identification and screening: (Brainstorming, Strength, and weaknesses in the system, environmental opportunities and threats, Identification and screening) – Project Appraisal and Selection.

UNIT -II SCOPE AND TIME MANAGEMENT 9

Scope Management – Defining the Project – SOW - WBS and PBS – Time Management - Network Diagram – Forward Pass and Backward Pass Critical path – PERT and CPM - AOA and AON methods – tools for Project Network – Estimation Techniques.

UNIT -III RESOURCE AND COST MANAGEMENT 9

Scheduling Resources – Resource Allocation methods - Reducing Project duration: Project Crashing – resource-leveling methods - Simulation for resource allocation. Goldratt's Critical Chain- Cost Management – Earned Value Method.

UNIT -IV PROJECT ORGANISATION, CONFLICT AND MANAGEMENT 9

Project Organization Structure,- Formal Organisation Structure – Organisation Design – Types of project organizations. Culture - Conflict – Origin & Consequences. Project Teams. Managing conflict – Team methods for resolving conflict. Risk identification: types of risk, risk checklists-Risk prioritization -Risk management tactics, Including risk avoidance, risk transfer, risk reduction, risk mitigation and contingency planning.

UNIT -V PERFORMANCE MANAGEMENT 9

Project Integration - Progress and Performance measurement and evaluation – Project monitoring information system, developing a status report and other control issues - Project audit and closure – audit process, project closure, team, team member and project manager evaluations - International Projects – environmental factors, cross-cultural considerations, selection and training for international projects - Future likely trends in Project management.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the skills necessary to effectively fulfill the responsibilities of a Project manager.

CO2 Evaluate the project management techniques like PERT, CPM etc

CO3 Understand the skills necessary to schedule, allocate resources and optimize project durations while managing project constraints.

CO4 Examine different organizational structures to address conflicts among projects

C05 Comprehend various risk management strategies.

CO6 Analyze and Measure project performance and communicate.

TEXT BOOKS:

1. Meredith Jack. R, and Mantel Samuel. J, ¯Project Management: Managerial Approach‖, John Wiley, 2012 Upon completion of the course, students will be able to:
2. "A Guide to the Project Management Body of Knowledge (PMBOK Guide)"Authors: Project Management Institute (PMI),Publisher: Project Management Institute,Year: 2021,ISBN-13: 978-1628255982.

REFERENCES:

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

WEB SOURCE REFERENCES

https://www.planview.com

https://opentextbc.ca

https://pmstudycircle.com

https://www.middleearthhr.com

https://whatfix.com/blog/organizational-structure/

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	-	2	-	1	-	2	1
CO2	2	-	1	2	-	-	1	-
CO3	3	2	-	-	-	--	2	-
CO4	2	-	-	-	1	-	2	-
CO5	-	-	-	-	3	-	-	-
CO6	-	2	-	-	-	2	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3337	SERVICES OPERATIONS MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Summarize the principles and concepts of service operations management, including the role of service design, service quality, service facility management, and managing capacity and demand.
- Gain knowledge and skills to ensure and enhance service quality, including the ability to apply quality management principles, measure customer satisfaction, and implement continuous improvement strategies.
- Examine service strategy and service competitiveness.
- Design a service delivery system for a given set of deliverables to its customers.

UNIT -I INTRODUCTION 9

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

UNIT -II SERVICE DESIGN 9

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

UNIT -III SERVICE QUALITY 9

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

UNIT -IV SERVICE FACILITY 9

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

UNIT -V MANAGING CAPACITY AND DEMAND 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Describe the principles and challenges of Service operations

CO2 Apply the Knowledge gained on new service development and technology in service

CO3 Apply the current trends in service quality and quality improvement programs

CO4 Analyze forthcoming trends related to facility design and layout

CO5 Analyze various facility location techniques, vehicle routing and factors success of retail locations.

CO6 Evaluate and intricate problems by formulating strategies for capacity demand management and applying the most appropriate solutions

TEXT BOOKS:

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

2. Richard D. Metters, Successful Service Operations Management, Cengage Learning, 2nd Edition, 2012.

REFERENCES:

1. Cengiz Haksever, Barry Render, Service Management, Pearson Education, 2013.

2. Robert Johnston, Graham Clark, Service Operations Management, Pearson Education, 2nd Edition, 2005. Bill Hollins and Sadie Shinkins, M Operations, Sage, 2006

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	-	2	-	1	-
CO2	2	3	1	2	-	1	2	-
CO3	2	3	-	3	2	-	2	2
CO4	2	2	2	1	2	3	2	-
CO5	-	3	1	-	-	2	3	2
C06	2	3	-	2	-	2	2	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3338	SUPPLY CHAIN MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand the essential concepts and importance of supply chain management in organizations.
- Compare different supply chain networks
- Develop an understanding of supply chain risk management and strategies for mitigating disruptions and enhancing resilience
- Examine design options, infrastructure, policies, outsourcing and green supply related to logistics
- Choose the appropriate supply chain innovations

UNIT -I INTRODUCTION 9

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

UNIT -II SUPPLY CHAIN NETWORK 9

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

UNIT -III PLANNING DEMAND, INVENTORY AND SUPPLY 9

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

UNIT -IV LOGISTICS 9

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

UNIT -V SUPPLY CHAIN INNOVATIONS 9

Supply Chain Integration, SC process restructuring, IT in Supply Chain; Agile Supply Chains, Legible supply chain, Green Supply Chain, Reverse Supply chain; Supply chain technology trends – AI, Internet of Things, Augmented Data Intelligence, Warehouse automation, Robotics, Immersive technologies.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the fundamental concepts of Supply chain and how it Improve performance measures.

CO2 Analyze the pivotal role of distribution network design, strategies within the supply chain
CO3 Analyze the impact of supply chain redesign on the inventory
CO4 Analyze the Role, design options, infrastructure and policies related to logistics.
CO5 Analyze outsourcing, green supply related to logistics.
CO6 Apply emerging supply chain technologies and innovations to measure their potential impact on their practices

TEXT BOOKS:

1. Sunil Chopra, Peter Meindl and Dharam Vir Kalra, Supply Chain Management – Strategy Planning and Operation, Pearson Education, Sixth Edition, 2016.

REFERENCES:

1. Janat Shah, Supply Chain Management – Text and Cases, Pearson Education, 2009
2. Ballou Ronald H, Business Logistics and Supply Chain Management, Pearson Education, 5th Edition, 2007.
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, 2011.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	-	2	1	-	2	2	-
CO2	-	2	2	-	-	-	2	-
CO3	2	3	-	-	2	-	-	2
CO4	-	2	1	-	-	-	-	-
CO5	2	2	-	2	-	2	1	-
CO6	3	-	2	-	1	-	2	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3339	PRODUCT DESIGN	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Students will be able to outline the characteristics, challenges, and costs associated with product design and development.
- Students will be able to apply product planning techniques
- Students will be able to apply the Design thinking and Concept testing
- Students will be able to analyze the concept and functions of PDM and PLM systems
- Students will be able to evaluate the design tools and select the appropriate one.
- Students will make use of intellectual property rights in real-world scenarios.

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 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.

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

COURSE OUTCOME(S):

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

CO1 Understanding about the concept of Product design and development.

CO2 Students will be able to Analyze the life cycle of a Product and apply Product planning techniques

CO3 Applying the Design thinking and Concept testing

CO4 To analyze the concepts and functions of PDM and PLM systems.

CO5 To evaluate the design tools and select the appropriate one.

CO6 To understand the concepts of patents and IPR.

REFERENCES:

1. Karl T. Ulrich, Steven D. Eppinger, Anita Goyal Product Design and Development, McGraw Hill Education, 4th Edition, 2009.
2. Kenneth B.Kahn, New Product Planning, Sage, 2010.
3. A.K. Chitale and R.C. Gupta, Product Design and Manufacturing, PHI, 2011.
4. Deborah E. Bouchoux, Intellectual Property Rights, Delmar, Cengage Learning, 2005.
5. Michael Grieves, Product Life Cycle Management, Tata McGraw Hill , 2006

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	-	-	-	-	3	-	2
CO2	-	2	-	-	-	-	3	2
CO3	-	2	-	-	-	2	1	1
CO4	-	2	-	-	-	2	-	2
CO5	2	-	-	-	-	-	-	2
CO6	-	2	-	-	-	-	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3340	MATERIALS MANAGEMENT	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Explain the key functions and activities involved in material management
- Appraise skills in developing materials plans and managing production schedules.
- Apply inventory level techniques for optimization and decreasing holding costs
- Examine purchasing principles, strategies including its techniques
- Determine measuring performance resulting in productivity and cost effectiveness
- Formulate techniques for various operations in warehouse

UNIT -I INTRODUCTION 9

Introduction to Materials Management, Operating environment-Production planning system - manufacturing planning and control system-manufacturing resource planning-enterprise resource planning-making the production plan - Master scheduling- Developing MPS.

UNIT -II MATERIALS PLANNING 9

Materials requirements planning-bill of materials- planning process-manufacturing resource planning-capacity management-Capacity Requirements Planning (CRP) - scheduling orders production activity control-Scheduling – Load Leveling- Theory of Constraints Control.

UNIT -III INVENTORY MANAGEMENT 9

Aggregate Inventory Management – Item inventory Management – Flow of materials Objectives of Inventory Management – Costs – ABC Analysis –Inventory Policy Decisions- objectives-control -Retail Discounting Model, Newsvendor Model; -Quantity discount models. Probabilistic inventory models.

UNIT -IV PURCHASING MANAGEMENT 9

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

UNIT -V WAREHOUSE MANAGEMENT 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the basics of materials management

CO2 Evaluate the techniques for optimizing material planning to ensure efficient production and delivery schedules

CO3 Apply the techniques for optimizing inventory levels and reducing holding costs

CO4 Analyze the purchasing principles, strategies and techniques

CO5 Evaluate measuring performance, ensuring productivity and cost effectiveness in warehouse operations.

C06 Explore techniques for efficient receiving, storage and order fulfilment in warehouse

TEXT BOOKS:

1. J. R. Tony Arnold, Stephen N. Chapman, Lloyd M. Clive, Materials Management, Pearson, 2012
2. A. K. Datla, Materials Management, Procedure, Text and Cases, PHI Learning, 2nd Edition, 2006

REFERENCES:

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. Ajay K Garg, Production and Operations Management**,** Tata McGraw Hill , 2012
4. Ronald H. Ballou and Samir K. Srivastava, Business Logistics and Supply Chain Management, Pearson education, Fifth Edition
5. S. N. Chary, Production and Operations Management, Tata McGraw Hill , 2012

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	-	-	-	-	3	-	2
CO2	-	2	-	-	-	-	3	2
CO3	-	2	-	-	-	2	1	1
CO4	-	2	-	-	-	2	-	2
CO5	2	-	-	-	-	-	-	2
CO6	-	2	-	-	-	-	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3341	SUPPLY CHAIN ANALYTICS	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Build descriptive analytics techniques to analyze past performance and trends.
- Summarize the principles and concepts of mathematical programming models
- Determine various methods used in facility design and optimization.
- Examine inventory aggregation models and comprehend techniques for vehicle allocation scheduling etc.,
- Analyze Master MCDM models for making decisions

UNIT -I INTRODUCTION 9

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

UNIT -II WAREHOUSING DECISIONS 9

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

UNIT -III INVENTORY MANAGEMENT 9

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

UNIT -IV TRANSPORTATION NETWORK MODELS 9

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

UNIT –V MULTI-CRITERIA DECISION MAKING MODELS 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Apply descriptive analytics techniques to find out historical data and gain insights into past performance and trends within a business context

CO2 Understand the principles and concepts of mathematical programming models in the context of optimization problems in facility location decisions

CO3 Evaluate space determination and layout methods used in facility design and optimization, including techniques for optimizing space allocation, workflow, and resource utilization

CO4 Analyze an inventory aggregation models and their applications in supply chain management, including techniques for consolidating and optimizing inventory levels across multiple locations or echelons.

CO5 Analyze vehicle routing problem heuristics, including techniques for optimizing route planning, vehicle allocation, and scheduling

CO6 Analyze the Master MCDM models (AHP, DEA, Fuzzy Logic, ANP, TOPSIS) and apply them in supply chain management for effective decision-making

TEXT BOOKS:

1. Vijayaraghavan T. A. S., Supply Chain Analytics, Wiley, 2021

REFERENCES:

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

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	2	-	-	2	-	2	-
CO2	-	1	-	-	-	2	-	-
CO3	2	-	-	-	-	1	-	2
CO4	-	2	-	-	-	-	2	-
CO5	-	2	-	2	-	-	-	1
CO6	-	-	2	-	-	2	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3342	LOGISTICS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Students should have a solid understanding of distribution channels, outsourcing logistics, transportation strategies, packaging performance measurement and costs, and current trends in logistics.
- Students will develop the skills to evaluate and select transportation strategies that align with organizational goals and objectives
- Gain a comprehensive understanding of distribution channels and the role they play in the movement of goods from producers to end-users

UNIT - I INTRODUCTION 9

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

UNIT - II DISTRIBUTION CHANNELS AND OUTSOURCING LOGISTICS 9

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

UNIT - III TRANSPORTATION AND PACKAGING 9

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

UNIT - IV PERFORMANCE MEASUREMENT AND COSTS 9

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

UNIT - V CURRENT TRENDS 9

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

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Comprehend the basics of logistics, customer value chain and the importance of logistics in strategy formulation
2. Analyze the structure and functions and how logistics function can be outsourced
3. Summarize the objectives and significance of international logistics in the global economy.
4. Evaluate how packaging can contribute to unitization and its role in both consumer and industrial contexts.
5. Analyze and evaluate the performance measurement and cost of logistics
6. Evaluate the current trends in logistics management

TEXT BOOKS:

1. Bowersox Donald J, Logistics Management – The Integrated Supply Chain Process, Tata McGraw Hill, 2010
2. Ronald H. Ballou, Business Logistics and Supply Chain Management, Pearson Education, 5th Edition, 2007

REFERENCES:

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

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	2	-	-	2	-	-	2
CO2	-	-	-	-	2	2	-	-
CO3	-	-	-	-	-	-	2	-
CO4	-	2	-	-	1	3		-
CO5	-	1	-	-	1	-	2	-
CO6	-	2	-	-	2	-	1	-

Internal Assessment				**End Semester Examinations**
Assessment I (100 Marks)		**Assessment II (100 Marks)**		
Individual Assignment / Case Study / Seminar / Mini Project	**Written Test**	**Individual Assignment / Case Study / Seminar / Mini Project**	**Written Test**	**Written Examinations**
40	60	40	60	100
40%				**60 %**

23MB3343	DESIGN THINKING	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Students will learn how to identify and formulate business hypotheses by conducting research, analyzing market trends, and understanding customer needs and preferences.
- Students will learn various methods for collecting data and conducting observations to gather relevant information about the problem and the user's context
- Understand the importance of rapid prototyping, iteration, and incremental improvements in developing effective solutions

UNIT - I INTRODUCTION TO DESIGN THINKING 9

Types of thinking – Analytical, Intuitive, Deduction, Induction, Abduction; Definitions of Design Thinking, Principles and elements of Design Thinking, Human centric approach

UNIT - II DESIGN THINKING PROCESS: STAGE I 9

Understanding the business hypothesis, customer perspective, inspiration, visualization through storyboarding etc

UNIT - III DESIGN THINKING PROCESS: STAGE II & III 9

Defining the problem, Data Collection, Observation techniques, gaining insights, Ideation, concept development

UNIT - IV DESIGN THINKING PROCESS: STAGE IV & V 9

Experimentation, prototyping principles, Prototyping, Testing, Assumptions Identification

UNIT - V DESIGN THINKING FOR INNOVATION 9

Design Thinking in organizations, how to diffuse DT into work culture, Using DT to innovate in business, Disruptive innovation

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Comprehend the fundamental concepts and principles of design thinking
2. Analyze the design thinking methodology, including its principles, stages, and key concepts
3. Learn how to visually communicate their ideas and concepts using storyboarding techniques
4. Evaluate how to effectively define the problem statement by synthesizing the information gathered through data collection and observation techniques.
5. Analyze the fourth and fifth stages of the design thinking process
6. Create effective strategies and techniques to diffuse Design Thinking principles and practices into the work culture of organizations.

REFERENCES:

1. Jimmy Jain, “Design Thinking for Startups: A Handbook for Readers and Workbook for Practitioners”, 1 st Edition, Notion Press, 2018.
2. Kelley, Tom, and Littman, Jonathan, “The Art of Innovation: Lessons in Creativity from IDEO, America's Leading Design Firm”, Profile Books Ltd, 2016.
3. Lewrick. Link, Liefer, “The Design Thinking Toolbox: A Guide to Mastering the Most Popular and Valuable Innovation Methods”, Wiley, 1st Edition, 2020
4. Roterberg, “Design Thinking for Dummies, For Dummies”, 1 Edition, John Wiley & Sons Inc (US), 2020.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	2	-	3	2	3
CO2	-	2	-	-	-	-	-	2
CO3	2	-	-	-	-	2	-	2
CO4	-	-	2	-	-	-	2	-
CO5	-	3	-	-	-	3	-	-
CO6	-	-	-	-	-	-	-	2

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3344	TOTAL PRODUCTIVE MAINTENANCE AND LEAN MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Students will gain a thorough understanding of Lean principles, its origins, and its application across different industries
- Students will learn a structured approach to problem-solving based on the scientific method
- Students will learn about TPM as a comprehensive approach to equipment maintenance and improvement

UNIT - I LEAN INTRODUCTION 9

Introduction – Background - Lean Thinking - Rules of Gemba, 3M - Seven Wastes - VA and NVA - Principles of Flow - Learning to See.

UNIT - II LEAN MANAGEMENT CORE CONCEPTS 9

5S Implementation Procedure - Layout Modification - Value Stream Mapping - Video Analysis.

UNIT - III LEAN TOOLS AND METHODOLOGIES 9

Mistake Proofing - Quick Changeover - Kanban - Inventory Management - Visual Management - Kaizen - A3 - Single Piece Flow vs Batch Production - TAKT/Cycle Time - Balancing the Line.

UNIT - IV TOTAL PRODUCTIVE MAINTENANCE 9

Introduction to TPM Concept - Objectives and Functions - Developing the TPM Implementation Plan - Pillars of TPM - TPM organization.

UNIT - V SCIENTIFIC PROBLEM SOLVING 9

Scientific problem solving - PDCA Cycle - SDCA Cycle, Human and Method Problems - TWI – Introduction - Job Instruction - Job Relations - Job Methods - TWI and Flow - Follow up Initiatives.

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Develop critical thinking to identify and solve key issues relating to lean management
2. Apply 5S, value stream mapping / video analysis in manufacturing and service industry
3. Apply key business practices of lean management tools in cross functional environment
4. create and use visual management tools facilitate process monitoring, and promote a culture of continuous improvement in the workplace
5. Comprehend the implementation of total productive maintenance tools in manufacturing and service industry
6. Analyze and execute action plans using problem-solving tools.

REFERENCES:

1. James P. Womack and Daniel T. Jones, “Lean Thinking: Banish Waste and Create Wealth in Your Corporation”, Free Press, 2015.
2. Jeffrey Liker and David Meier, “The Toyota Way Fieldbook”, Tata McGraw Hill, 2005.
3. Jeffrey Liker and David Meier, “Toyota Talent: Developing Your People the Toyota Way”, Tata McGraw Hill, 2007.
4. Masaaki Imai, “Gemba Kaizen: A Commonsense Approach to a Continuous Improvement Strategy”, Tata McGraw Hill, 2012.
5. Mike Rother, “Toyota Kata: Managing People for Improvement, Adaptiveness and Superior Results”, Tata McGraw Hill, 2009.
6. Pascal Dennis, “Lean Production Simplified: A Plain-Language Guide to the World's Most Powerful Production System”, Productivity Press, 3rd Edition, 2015

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	-	2	-	1	3	2	1
CO2	2	-	1	2	-	2	1	-
CO3	3	2	-	-	-	1	2	-
CO4	2	-	-	-	1	-	2	-
CO5	-	-	-	-	3	-	-	-
CO6	-	2	-	-	-	2	-	-

Internal Assessment				**End Semester Examinations**
Assessment I (100 Marks)		**Assessment II (100 Marks)**		
Individual Assignment / Case Study / Seminar / Mini Project	**Written Test**	**Individual Assignment / Case Study / Seminar / Mini Project**	**Written Test**	**Written Examinations**
40	60	40	60	100
40%				**60 %**

23MB3346	DATA MINING FOR BUSINESS INTELLIGENCE	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- The course aims to provide a foundation a understanding of data mining concepts, techniques, and algorithms.
- To enable students to apply the data mining process effectively to assess and improve classification and prediction models.
- To enable students to analyze classification and clustering techniques to derive meaningful insights from data.
- To enable students to analyze and apply machine learning and AI techniques for solving complex problems.

UNIT -I INTRODUCTION 9

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

UNIT -II DATA MINING PROCESS 9

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

UNIT -III PREDICTION TECHNIQUES 9

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

UNIT -IV CLASSIFICATION AND CLUSTERING TECHNIQUES 9

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

UNIT -V MACHINE LEARNING AND AI 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the concepts of data mining in optimizing business process.
CO2 Apply the stages and steps involved in data mining process by choosing appropriate method for specific data analysis tasks.
CO3 Apply validation techniques in data mining for data visualization
CO4 Analyze the various prediction techniques by using appropriate metrics to resolve specific problems.
CO5 Analyze various classification and clustering algorithms considering factors like scalability, interpretability and model complexity.
CO6 Analyze different machine learning and AI algorithms using appropriate metrics and interpret the results in the context of specific problems

TEXT BOOKS:

1. Jaiwei Ham and Micheline Kamber, Data Mining concepts and techniques, Kauffmann Publishers 2006
2. Efraim Turban, Ramesh Sharda, Jay E. Aronson and David King, Business Intelligence, Prentice Hall, 2008
3. W. H. Inmon, Building the Data Warehouse, fourth edition Wiley India Pvt. Ltd. 2005

REFERENCES:

1. Ralph Kimball and Richard Merz, The data warehouse toolkit, John Wiley, 3rd edition, 2013
2. Michel Berry and Gordon Linoff, Mastering Data mining, John Wiley and Sons Inc, 2nd Edition, 2011
3. G. K. Gupta, Introduction to Data mining with Case Studies, Prentice hall of India, 2011
4. Elizabeth Vitt, Michael Luckevich Stacia Misner, Business Intelligence, Microsoft, 2011
5. Michalewicz Z., Schmidt M. Michalewicz M and Chiriac C, 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.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	-	2	1	-	2	2	-
CO2	-	2	2	-	-	-	2	-
CO3	2	3	-	-	2	-	-	2
CO4	-	2	1	-	-	-	-	-
CO5	2	2	-	2	-	2	1	-
CO6	3	-	2	-	1	-	2	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3347	DATA ANALYTICS WITH R PROGRAMMING	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- To equip students with the knowledge and skills necessary to effectively analyze data using the R programming language.
- Become acquainted with the use of R tool for Data Science applications.
- Acquire experience in analyzing data using R.
- To enable students to apply statistical analysis techniques in R to draw insights and make data driven decisions.
- To enable students to apply methods for creating data for analytics thereby developing the skills to generate effective data sets for advanced analytical processes.

UNIT -I OVERVIEW OF R PROGRAMMING 9

Environment setup with R Studio- SAS versus R - R, S, and S-plus - Obtaining and managing R - Objects - types of objects, classes, creating and accessing objects- Arithmetic and matrix operations-Introduction to functions.

UNIT -II WORKING WITH R 9

Reading and writing data-R libraries-Functions and R programming-the If statement looping: for, repeat, while-writing functions-function arguments and options- Basic R commands.

UNIT -III READING AND GETTING DATA IN TO R (External Data) 9

Using CSV files, XML files, Web Data, JSON files, Databases and Excel files. Working with R Charts and Graphs: Histograms, Box plots, Bar Charts, Line Graphs, Scatterplots , Pie Charts.

UNIT -IV STATISTICAL ANALYSIS IN R 9

Random Forest, Decision Tree, Normal and Binomial distributions, Time Series Analysis, Linear and Multiple Regression, Logistic Regression, Survival Analysis.

UNIT -V DATA FOR ANALYTICS 9

Creating data for analytics through designed experiments, Creating data for analytics through active learning, Creating data for analytics through reinforcement learning

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the students to become proficient in using R programming language, including understanding the syntax, working with objects, performing operations, and using functions.

CO2 Apply R programming constructs, libraries and functions to read, write and manipulate data and develop efficient programs using looping structures and conditional statements.

CO3 Apply R programming techniques to import manipulate and visualize data from various external sources using charts and graphs.

CO4 Apply statistical techniques such as regression, probability distributions, and time series analysis to analyze data and make informed decisions.

CO5 Apply advanced analytics techniques such as Random Forest and Decision Trees to analyze complex datasets and make predictions or classifications.

CO6 Apply techniques to designed experiments and collect data for analytics purposes, as well as explore methods like active learning and reinforcement learning to improve data accuracy.

TEXT BOOKS:

1. Raghav Bali, Dipanjan Sarkar, and Tushar Sharma. Learning Social Media Analytics with R. Packt Publishing Ltd, 2017.
2. Nina Zumel and John Mount. Practical Data Science with R. Manning Publications, 2014.
3. Peter Dalgaard. Introductory Statistics with R. 1st Edition. Springer-Verlag New York, Inc., 2019. ISBN 0-387-95475-9.

REFERENCE BOOKS:

1. W. N. Venables and B. D. Ripley. 2002, Modern Applied Statistics with S. 4th Edition.Springer.(ISBN 0-387-95457-0)]
2. Andreas Krause, Melvin Olson. 2005, The Basics of S-PLUS, 4th edition, SpringerVerlag, New York (ISBN 0-387-26109-5)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	3	-	-	-	2	-	-
CO2	2	3	-	-	-	3	-	-
CO3	-	-	-	-	3	-	3	-
CO4	-	-	-	2	-	-	3	-
CO5	-	-	-	-	-	-	-	-
CO6	3	-	-	-	-	2	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3348	DATA VISUALIZATION FOR MANAGERS	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand concepts required for visualization.
- Comprehend the students with fundamentals of Tableau.
- Enable students to understand Tableau techniques for effective data visualization and communication.
- Students will Analyse Microsoft Power Business Intelligence Tool to ensure security in Power BI environment.
- Apply the students with advanced Data Visualization Tools.

UNIT -I DATA VISUALIZATION –A PRIMER OF BUSINESS INTELLIGENCE BUSINESS **9**

Intelligence - Data Visualization Evolution and Characteristics – Importance of Data Visualization – Data Visualization Process - Data Visualization Tools and Software - Data Visualization Techniques – Best Practices in Data Visualization.

UNIT -II DATA VISUALIZATION USING TABLEAU – BASICS **9**

Introduction to Tableau – Tableau interface & Architecture – Data connections & Data Sources – Preparation of Data – Exploring and analyzing data – Creating basic charts – Apply analytics to a worksheet – Creating Groups and Hierarchies - Mapping -Sharing Insights

UNIT -III DATA VISUALIZATION USING TABLEAU **9**

Advanced calculations - Parameters - Special Charts - Creation of Dashboards – Dashboard Actions -Story Boards Preparation - Sharing the work – Profile creation in Tableau Public

UNIT -IV REPORTS & DASHBOARDS USING POWER BI **9**

Power BI introduction – Power BI Architecture & Process – Connecting Power BI with different Data Sources – Power Query for Data transformation- Data Modelling in Power BI – Reports – Visualization types in Power BI – Statics and Live Dashboards- Data
Refresh & Security.

UNIT -V VISUALIZING THROUGH R , PYTHON & QLIKVIEW **9**

Grammar of Graphics – GGplot and visualizations using R – Advanced visualizations using matplotlib, seaborn and pyplot – Qlikview overview.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend on the concepts required for Data Visualization
CO2 Understand the basics of Data Visualization using Tableau
CO3 Comprehend on Story Telling using the Visualization Tool Tableau
CO4 Analyze various data models and dashboard functionalities.
CO5 Analyze various visualization tools in preparing reports

CO6 Apply the principles of the Grammar of Graphics to create dynamic visualization using GG Plot in R.

TEXT BOOKS :

1. Storytelling with Data: A Data Visualization Guide for Business Professionals, ColeNussbaumerKnaflic, Amazon Asia-Pacific Holdings Private Limited, 2015.
2. Microsoft Power BI Complete Reference: Bring your data to life with the powerful features of Microsoft Power BI, Devin Knight, Pack Publishing, 2018.
3. Data Visualization and Exploration with R: A practical guide to using R, R Studio, and Tidyverse for data visualization, exploration, and data science applications‖, Eric Pimpler, Amazon Asia-Pacific Holdings Private Limited, 2017.

REFERENCE BOOKS :

1.Practical Tableau, Ryan Sleeper, O'Reilly Media, 2018

2.Visualization: Visual representations of data and information‖, The Open University, Amazon Asia-Pacific Holdings Private Limited, 2016.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	3	-	-	-	2	-	-
CO2	2	3	-	-	-	3	-	-
CO3	-	-	-	-	3	-	3	-
CO4	-	-	-	2	-	-	3	-
CO5	-	-	-	-	-	-	-	-
CO6	3	-	-	-	-	2	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3349	SOCIAL MEDIA WEB ANALYTICS	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand the crucial role of social media web analytics for businesses and organizations to measure their online presence, track their performance, and make data-driven decisions.
- Articulate various social media analytics tools and platforms.
- Select the appropriate web strategies by analyzing the trends and advancements in social media web analytics, including new tools, techniques, and platforms.

UNIT -I INTRODUCTION 9

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

UNIT -II COMMUNITY BUILDING AND MANAGEMENT 9

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

UNIT -III SOCIAL MEDIA POLICIES AND MEASUREMENTS 9

Social Media Policies-Etiquette, Privacy - ethical problems posed by emerging social media technologies - The road ahead in social media - The Basics of Tracking Social Media - social media analytics - In-sights gained from Social Media - Customized Campaign Performance Reports - Observations of social media use

UNIT -IV WEB ANALYTICS 9

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

UNIT -V SEARCH ANALYTICS 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the significance of social media web analytics for businesses and organizations to measure their online presence.

CO2 Summarize community building through collective identity in social media.

CO3 Interpret various social media policies.

CO4 Apply metrics to Track performance, and make data-driven decisions.

CO5 Apply web analytics tools and techniques to collect, process, and analyze web data for generating meaningful insights.

CO6 Apply search analytics techniques to optimize user engagement, analyze web traffic, and improve content management across various platforms.

TEXT BOOKS:

1. Christian Fuchs, Social-Media a critical introduction, SAGE Publications Ltd, 2014
2. Eric T. Peterson, Web Analytics Demystified, Celilo Group Media and Café Press, 2004.

REFERENCES:

1. K. M. Shrivastava, Social Media in Business and Governance, Sterling Publishers Private Limited, 2013.
2. Bittu Kumar, Social Networking, V & S Publishers, 2013.
3. Avinash Kaushik, Web Analytics - An Hour a Day, Wiley Publishing, 2007
4. Takeshi Moriguchi, Web Analytics Consultant Official Textbook, 7th Edition, 2016

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	**3**	**2**	**-**	**-**	**-**	**-**	**-**	**-**
CO2	**2**	**-**	**-**	**-**	**-**	**1**	**-**	**-**
CO3	**3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
CO4	**2**	**-**	**-**	**-**	**-**	**2**	**3**	**-**
CO5	**3**	**-**	**-**	**-**	**-**	**-**	**3**	**-**
CO6	**2**	**-**	**-**	**-**	**-**	**-**	**3**	**-**

Internal Assessment				**End Semester Examinations**
Assessment I (100 Marks)		**Assessment II (100 Marks)**		
Individual Assignment / Case Study / Seminar / Mini Project	**Written Test**	**Individual Assignment / Case Study / Seminar / Mini Project**	**Written Test**	**Written Examinations**
40	60	40	60	100
40%				**60 %**

23MB3350	ARTIFICIAL INTELLIGENCE AND DEEP LEARNING	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Apply foundational concepts of Artificial Intelligence to solve real world problems.
- Apply various knowledge representation techniques in addressing complex problem-solving scenarios
- Apply the effectiveness of expert systems and machine-learning techniques in addressing diverse real-world challenges.
- Examine the construction of Deep Feed Forward Networks.
- Comprehend the Techniques involved in Regularization of Deep Learning Models

UNIT -I **INTELLIGENT SYSTEMS** **9**

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

UNIT -II **KNOWLEDGE REPRESENTATION** **9**

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

UNIT -III **AI APPLICATIONS & MACHINE LEARNING** **9**

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

UNIT -IV **DEEP NETWORKS** **9**

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

UNIT -V **DEEP LEARNING MODELS** **9**

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Apply foundational concepts of AI to analyze and implement various real world applications.

CO2 Apply a frame-based model to represent structured knowledge for an advanced planning task.

CO3 Apply the Knowledge of Expert systems and applications of Machine learning.

CO4 Dissect the architecture and principles behind deep forward networks.

CO5 Examine how the choice of hidden unit architectures impacts the learning and accuracy of a deep network.

CO6 Comprehend the performance of approximate second-order methods and meta-algorithms for optimizing complex deep learning models under different scenarios.

TEXT BOOKS

1. Saroj Kaushik, "Artificial Intelligence", Cengage Learning India Pvt. Ltd., 2011

2. Ian Goodfellow, Yoshua Bengio, Aaron Courville, ¯Deep Learning‖, MIT Press, 2016

REFERENCE BOOKS

1. Deepak Khemani, "A First Course in Artificial Intelligence", McGraw Hill Education (India) Private Limited, New Delhi

2. Elaine Rich, Kevin Night, Shivashankar B Nair, "Artificial Intelligence" Third Edition, McGraw Hill, 2008.

3. Li Deng and Dong Yu, "Deep Learning Methods and Applications", Foundations and Trends in Signal Processing.

4. YoshuaBengio, "Learning Deep Architectures for AI", Foundations and Trends in Machine Learning

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	3	-	-	-	2	-	-
CO2	2	3	-	-	-	2	-	-
CO3	3	-	-	-	-	2	2	-
CO4	-	3	-	-	-	-	1	-
CO5	2	-	-	-	-	2	1	-
CO6	1	3	-	-	-	-	2	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3351	MULTIVARIATE DATA ANALYSIS	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Students will be able to demonstrate a comprehensive understanding of the fundamental concepts and techniques in multivariate analysis
- Students will be equipped with the necessary skills to prepare for multivariate analysis effectively.
- Students will be able to examine the skill sets required by students to perform multiple linear regression and factor analysis.
- Students will be able to develop advanced analytical skills in Latent variable techniques.
- Students will be able to choose the appropriate advanced multivariate techniques.

UNIT -I INTRODUCTION 9

Introduction – Basic concepts – Sympson's Paradox - Uni-variate, Bi-variate and Multivariate 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

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.

UNIT -III MULTIPLE LINEAR REGRESSION ANALYSIS, FACTOR ANALYSIS 9

Introduction – Multiple Linear Regression Analysis – Basic concepts – Multiple linear regression model – Least square estimation – Inferences from the estimated regression function – Factor Analysis: Definition – Approaches to factor analysis – methods of estimation – Factor rotation – Factor scores - Cluster Analysis –Assumptions - Deriving clusters - assessing fi t- interpretation and validation.

UNIT -IV LATENT VARIABLE TECHNIQUES 9

Confirmatory Factor Analysis, Structural equation modelling, Mediation models, Moderation models, Conditional processes, longitudinal studies, latent growth model, Bayesian inference.

UNIT -V ADVANCED MULTIVARIATE TECHNIQUES 9

Multiple Discriminant Analysis, Logistic Regression, ANOVA and MANOVA, Conjoint Analysis, multidimensional scaling, canonical correlation.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend multivariate dependence and interdependence methods in data analysis.

CO2 Apply appropriate techniques for data collection, measurement, and handling of missing data in the preparation for multivariate analysis.

CO3 Analyze the most appropriate statistical techniques for a multivariate dataset

CO4 Apply Factor Analysis technique to solve multivariate dataset.

CO5 Apply commonly used multivariate data analysis techniques, and interpret results

CO6 Apply advanced multivariate data techniques.

REFERENCE :

1. Joseph F Hair, Barry J Babin, Rolph E Anderson, & William C. Black, Multivariate Data Analysis, Pearson Education, 8th edition, 2018
2. Barbara G. Tabachnick, Linda S.Fidell, Using Multivariate Statistics, 6th Edition, Pearson International Edition, 2013.
3. Richard A Johnson and Dean W.Wichern, Applied Multivariate Statistical Analysis, Prentice Hall, 2019.
4. Neil H Spencer, Essentials of Multivariate Data Analysis, CRC Press, 2013
5. Francois Husson, Sebastien Le, Jerome Pagles, Exploratory Multivariate Analysis by Examples using R , 2nd edition, Chapman & Hall/CRC Computer Science & Data Analysis, 2017.
6. Richard A Johnson and Dean W. Wichern, Applied Multivariate Statistical Analysis, 6th Edition, 2015.
7. Trevor F Cox, Introduction to Multivariate Data Analysis, 2009, Hodder Education.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	-	-	-	1	2	-
CO2	3	3	-	-	-	1	1	-
CO3	3	3	-	-	-	2	2	-
CO4	3	3	1	1	-	2	3	1
CO5	3	3	1	1	-	2	3	1
CO6	3	3	1	1	-	2	3	1

Internal Assessment				**End Semester Examinations**
Assessment I (100 Marks)		**Assessment II (100 Marks)**		
Individual Assignment / Case Study / Seminar / Mini Project	**Written Test**	**Individual Assignment / Case Study / Seminar / Mini Project**	**Written Test**	**Written Examinations**
40	60	40	60	100
40%				**60 %**

23MB3352	BUSINESS ANALYTICS USING PYTHON	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Understand the evolution of business data and different types of analytics, and how to summarize and report marketing data using tools like Excel and Tableau.
- Explore segmentation analytics, clustering algorithms, and positioning analysis to support strategic marketing decisions
- Develop predictive models for purchase behavior, social media sentiment analysis, market basket analysis, and recommender systems to enhance marketing strategies and customer engagement.

UNIT -I INTRODUCTION 9

Introduction to Business Analytics - Evolution of Business Data and Analytics timeline – Types of Analytics - Marketing Analytics Applications - Summarizing & Reporting Marketing Data using Excel.

UNIT -II VISUALIZING BUSINESS DATA USING TABLEAU 9

Visualizations Using Python & R - Understanding the Metrics across domains -Developing Metrics - Flowchart for Metric Creation.

UNIT -III BUSINESS MODELS & STRATEGIES 9

Business Models - Marketing Engineering – Segmentation Analytics – Clustering Algorithms - Positioning Analysis - Data Mining applications.

UNIT -IV MARKETING MIX ANALYTICS 9

New Product development decisions - Pricing the Product - Forecasting the Sales – Allocating the Retail space & Sales Resource – Consumer Attribution Modelling Methods.

UNIT -V MARKETING MIX ANALYTICS APPLICATIONS 9

Customer Churn Modelling – Purchase Behaviour Prediction Models- social media Listening and Sentimental Analysis – Market Basket Analysis – RFM Analysis – Recommender Systems development.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehensive Knowledge of Python for conducting business analytics tasks, encompassing data manipulation, analysis, and visualization

CO2 Analyze how to employ Python libraries to craft compelling and informative visual representations of data, empowering them to effectively convey insights to stakeholders.

CO3 Evaluate the practical experience in utilizing Python libraries to implement advanced analytics methods

CO4 Analyze business data using Python, extract valuable insights, and leverage them to make well-informed decisions

CO5 Examine hands-on projects and case studies that simulate real-world scenarios, enabling them to apply Python

CO6 Apply business analytics techniques to solve complex problems and generate actionable recommendations.

REFERENCE :

1. “R for Marketing Research and Analytics”, Chris Chapman, Springe Publications, 1st Edition, 2015.
2. “Business Analytics”, Dinesh Kumar U Wiley India, 1st Edition, 2017.
3. Marketing Metrics: The Definitive Guide to Measuring Marketing Performance”, Paul W Farris, Pearson Education, 2nd Edition, 2010
4. Business Analytics- Texts and Cases”, Tanushri Banerjee & Arindham Banerjee Sage Publications, 1st Edition, 2019
5. Marketing Analytics – Data Driven Techniques with Microsoft Excel”, Wayne L Winston,Wiley Publications, 1st Edition, 2015.
6. Sridhar S, Indumathi J and Hariharan V M, "Python Programming", Pearson, 2023.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	3	-	-	-	2	-	-
CO2	2	3	-	-	-	3	-	-
CO3	-	-	-	-	3	-	3	-
CO4	-	-	-	2	-	-	3	-
CO5	-	-	-	-	-	-	-	-
CO6	3	-	-	-	-	2	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3353	BUSINESS INTELLIGENCE, BIG DATA, CLOUD COMPUTING	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Gain comprehensive knowledge of big data platforms, including Pig, Hive, HBase, and Zookeeper, while exploring data processing techniques and intelligent data analysis.
- Apply various data mining methods, including text, web, spatial, and process mining
- Examine predictive analytics and data visualization techniques for effective decision-making.

UNIT -I BIG DATA FRAMEWORKS 9

Introduction to Big Data Platform – Challenges of Conventional Systems - Intelligent data analysis – Nature of Data - Analytic Processes and Tools - Analysis vs Reporting. Applications on Big Data Using Pig and Hive – Data processing operators in Pig – Hive services – HiveQL – Querying Data in Hive - fundamentals of HBase and Zookeeper - IBM Info Sphere Big Insights and Streams.

UNIT -II DATA MINING TOOLS, METHODS AND TECHNIQUES 9

Data mining, Text mining, Web mining, Spatial mining, Process mining, BI process, Private and Public intelligence, Strategic assessment of implementing BI Data Mining Techniques: Introduction, Statistical Perspective on Data Mining, Statistics-need and algorithms, Naïve Bayes Algorithm, ChiSquare Automatic Interaction-Detectors (CHAID)-Classification and Regression Tree (CART) - Analysis of Unstructured Data.

UNIT -III MODERN INFORMATION TECHNOLOGY AND ITS BUSINESS OPPORTUNITIES 9

Business intelligence software, BI on web, Ethical and legal limits, Industrial espionage, modern techniques of crypto analysis, managing and organizing for an effective BI Team.

UNIT -IV CLOUD COMPUTING INTRODUCTION AND APPLICATIONS 9

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, Cloud Computing Applications: Overview on Amazon AWS, Microsoft Azure and Google App Engine.

UNIT -V VISUALIZATION TECHNIQUES 9

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

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Comprehend the knowledge on big data platform, applications on big data using Pig and Hive.

CO2 Explore insights on data mining tools, methods and techniques

CO3 Examine the Comprehensive knowledge on business intelligence software

CO4 Analyze modern techniques of crypto analysis.

CO5 Summarize cloud computing characteristics, challenges and applications.

CO6 Evaluate predictive analytics and visual data analysis techniques.

REFERENCE :

1. Jaiwei Ham and Micheline Kamber, Data Mining concepts and techniques, Kauffmann Publishers, 2006
2. Efraim Turban, Ramesh Sharda, Jay E. Aronson and David King, Business Intelligence,Prentice Hall, 2008.
3. Colleen Mccue, "Data Mining and Predictive Analysis: Intelligence Gathering and Crime Analysis", Elsevier, 2nd Edition, 2015.
4. Michael Berthold, David J. Hand, "Intelligent Data Analysis", Springer, 2nd Edition, 2007.
5. Frank J Ohlhorst, "Big Data Analytics: Turning Big Data into Big Money", Wiley and SAS Business Series, 2013.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	3	-	-	-	2	-	-
CO2	2	3	-	-	-	3	-	-
CO3	-	-	-	-	3	-	3	-
CO4	-	-	-	2	-	-	3	-
CO5	-	-	-	-	-	-	-	-
CO6	3	-	-	-	-	2	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %

23MB3354	BLOCK CHAIN TECHNOLOGY	L	T	P	C
		3	0	0	3

COURSE OBJECTIVE:

- Gain a comprehensive understanding of blockchain's key characteristics, structure, and different network models, along with the evolution of blockchain technology and its various applications.
- Students Learn about the historical background, protocols, and legal aspects of cryptocurrencies, with a deep dive into Ethereum's architecture
- Examine the unique features, components, and advantages of Hyperledger Fabric, and compare it with other blockchain technologies for enterprise-level applications.

UNIT -I INTRODUCTION 9

Introduction to Blockchain Technology, Gartner's Hype Curve and Evolution of Blockchain, Genesis and Need for Blockchain , Key Characteristics and Structure of Blockchain, Different Types of Blockchains and Network Models, Mining and Consensus Mechanisms in Blockchain, Understanding the Bitcoin Whitepaper , Components of a Block and Forks (Soft & Hard Forks), Unspent Transaction Outputs (UTXOs) and Various Bitcoin Forks, Wallets, Transactions, and Public/Private Keys, Blockchain Applications: Internet of Things, Medical Record Management, Domain Name Service, and Future Implications of Blockchain.

UNIT -II BLOCKCHAIN & APPLICATIONS 9

Introduction to Blockchain Technology, Gartner's Hype Curve and Evolution of Blockchain, Genesis and Need for Blockchain , Key Characteristics and Structure of Blockchain, Different Types of Blockchains and Network Models, Mining and Consensus Mechanisms in Blockchain, Understanding the Bitcoin Whitepaper , Components of a Block and Forks (Soft & Hard Forks), Unspent Transaction Outputs (UTXOs) and Various Bitcoin Forks, Wallets, Transactions, and Public/Private Keys, Blockchain Applications: Internet of Things, Medical Record Management, Domain Name Service, and Future Implications of Blockchain.

UNIT -III CRYPTOCURRENCY 9

Historical Background of Cryptocurrencies, Distributed Ledger Technology and its Role, Bitcoin Protocols: Mining Strategy and Rewards, Ethereum- Construction, DAO, Smart Contracts, GHOST Protocol, Vulnerabilities, Attacks, and Sidechains in Cryptocurrencies, Namecoin and its Significance. Cryptocurrency Regulation: Stakeholders, Origins of Bitcoin, Legal Aspects, Cryptocurrency Exchanges, Black Market, and Global Economy.

UNIT -IV ETHEREUM 9

Introduction to Ethereum and its Importance, Ethereum Foundation and Whitepaper ,Functioning of Ethereum Network , Ethereum Virtual Machine (EVM) and its Features, Types of Transactions in Ethereum , Mining and Consensus Mechanisms in Ethereum , Understanding Smart Contracts and their Role in Ethereum.

UNIT -V HYPERLEDGER FABRIC 9

Introduction to Hyperledger Framework, Hyperledger Fabric and its Unique Features, Comparison between Fabric and Other ,Blockchain Technologies, Architecture of Hyperledger Fabric , Components and Advantages of Hyperledger Fabric Blockchain.

TOTAL: 45 PERIODS

COURSE OUTCOME(S):

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

CO1 Understand the significance and fundamental principles of Blockchain technology.

CO2 Summarize and relate key features, diverse platform types, and programming languages used in Blockchain technology.

CO3 Analyze and solve complex problems to gain deeper insights into cryptocurrency concepts.

CO4 Apply the fundamental design principles that govern Ethereum, a widely used Blockchain platform.

CO5 Evaluate the construction of hyperledger fabric Model

CO6 Comprehensive understanding of a prominent Blockchain framework

REFERENCE :

1. Laurence, T. (2023). Blockchain for dummies. John Wiley & SonsImran Bashir, Mastering Blockchain, Packt Publishing, March 2017
2. Debajani Mohanty, BlockChain: From Concept to Execution, BPB Publications, 2nd edition, 2018
3. Artemis Caro, Blockchain: Bitcoin, Ethereum &Blockchain: The Beginners Guide to Understanding the Technology Behind Bitcoin & Cryptocurrency, 2017
4. Andreas M. Antonopoulos, Gavin Wood, Mastering Ethereum: Building Smart Contracts and DApps, O'REILLY, 2018
5. Nitin Gaur, Luc Desrosiers, Venkatraman Ramakrishna, Petr Novotny, Dr. Salman A. Baset and Anthony O'Dowd, Hands-on Blockchain with Hyperledger, Packt Publishing, 2018
6. Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller, Steven Goldfede, "Bitcoin and Cryptocurrency Technologies", Princeton University Press, 2016.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	3	-	-	-	2	-	-
CO2	2	3	-	-	-	3	-	-
CO3	-	-	-	-	3	-	3	-
CO4	-	-	-	2	-	-	3	-
CO5	-	-	-	-	-	-	-	-
CO6	3	-	-	-	-	2	-	-

Internal Assessment				End Semester Examinations
Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Written Examinations
40	60	40	60	100
40%				60 %