PANIMALAR ENGINEERING COLLEGE

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

M.B.A - MASTER OF BUSINESS ADMINISTRATION

REGULATION 2021

CURRICULUM & SYLLABUS

PANIMALAR ENGINEERING COLLEGE
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Bangalore Trunk Road, Varadharajapuram,
Poonamallee, Chennai – 600 123

Department of MASTER OF BUSINESS ADMINISTRATION

Curriculum and Syllabus
Regulation-2021

M.B.A – MASTER OF BUSINESS ADMINISTRATION

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.

CURRICULUM

Semester I

S. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	21MA3101	Statistics for Management	PCC	4	3	1	0	4
2.	21MB3102	Management Concepts and Organizational Behavior	PCC	3	3	0	0	3
3.	21MB3103	Managerial Economics	PCC	3	3	0	0	3
4.	21MB3104	Accounting for Decision Making	PCC	4	3	1	0	4
5.	21MB3105	Legal Aspects of Business	PCC	3	3	0	0	3
6.	21MB3106	Information Management	PCC	3	3	0	0	3
7.	21MB3107	Marketing Management	PCC	3	3	0	0	3
PRACTICALS								
8.	21MB3108	Indian ethos and business ethics (Seminar)	EEC	4	0	0	4	2
9.	21MB3109	Business Communications (Laboratory)	EEC	4	0	0	4	2
TOTAL				31	21	2	8	27

Semester II

S. No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	21MB3201	Quantitative Techniques for Decision Making	PCC	4	3	1	0	4
2.	21MB3202	Financial Management	PCC	3	3	0	0	3
3.	21MB3203	Human Resource Management	PCC	3	3	0	0	3
4.	21MB3204	Operations Management	PCC	4	3	1	0	4
5.	21MB3205	Business Research Methods	PCC	3	3	0	0	3
6.	21MB3206	Business Analytics	PCC	3	3	0	0	3
7.		Non-Functional Elective	PEC	3	3	0	0	3
Practical								
7.	21MB3214	Data analysis and Business Modelling (Laboratory)	PCC	4	0	0	4	2
8.	21MB3215	Rural Community Engagement	EEC	4	0	0	4	2
TOTAL				31	21	2	8	27

SEMESTER III

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	21MB3301	Strategic Management	PCC	3	3	0	0	3
2.	21MB3302	International Business Management	PCC	3	3	0	0	3
3.		Elective I	PEC	3	3	0	0	3
4.		Elective II	PEC	3	3	0	0	3
5.		Elective III	PEC	3	3	0	0	3
6.		Elective IV	PEC	3	3	0	0	3
7.		Elective V	PEC	3	3	0	0	3
8.		Elective VI	PEC	3	3	0	0	3
PRACTICALS								
9.	21MB3390	Creativity and Innovation Laboratory	EEC	4	0	0	4	2
10.	21MB3391	Summer Internship	EEC	4	0	0	4	2
TOTAL				32	24	0	8	28

NOTE: In the third semester Students need to choose - Three electives from 2 functional streams for Dual Specialization

Summer internship – Minimum of 4 weeks of internship Training diary has to be submitted. Students need to get attendance certificate from the industry after completion and to be submitted to CoE.

SEMESTER IV

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
PRACTICALS								
	21MB3401	Project Work	EEC	24	0	0	24	12
TOTAL				24	0	0	24	12

TOTAL NO. OF CREDITS: 94

NON-FUNCTIONAL ELECTIVES

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	21MB3207	Entrepreneurship Development	PEC	3	3	0	0	3
2	21MB3208	Corporate Governance	PEC	3	3	0	0	3
3	21MB3209	Event Management	PEC	3	3	0	0	3
4	21MB3210	Micro and Small Business	PEC	3	3	0	0	3
5	21MB3211	Fuzzy logic for Management decision making	PEC	3	3	0	0	3
6	21MB3212	Intellectual Property Rights	PEC	3	3	0	0	3
7	21MB3213	Sustainable Management	PEC	3	3	0	0	3

PROFESSIONAL ELECTIVES FOR SEMESTER III [PEC]FUNCTIONAL ELECTIVES

Stream/ Specialization: Finance (8 subjects)

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	21MB3303	Investment Analysis and Portfolio management	PEC	3	3	0	0	3
2	21MB3304	Financial Markets	PEC	3	3	0	0	3
3	21MB3305	Banking Management and	PEC	3	3	0	0	3
4	21MB3306	Financial Derivatives	PEC	3	3	0	0	3
5	21MB3307	Financial Modeling	PEC	3	3	0	0	3
6	21MB3308	International Finance	PEC	3	3	0	0	3
7	21MB3309	Behaviorial Finance	PEC	3	3	0	0	3
8	21MB3310	Business Analysis and Valuation	PEC	3	3	0	0	3
9	21MB3311	Financial Risk Management and Insurance	PEC	3	3	0	0	3
10	21MB3312	Project Appraisal and Finance	PEC	3	3	0	0	3
11	21MB3313	Venture Capital and Private Equity	PEC	3	3	0	0	3

Stream/ Specialization: Human Resource Management (9 subjects)

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	21MB3316	Strategic Human Resource Management	PEC	3	3	0	0	3
2	21MB3317	Industrial Relations and Labor Legislations	PEC	3	3	0	0	3
3	21MB3318	Social Psychology	PEC	3	3	0	0	3
4	21MB3319	Organizational Design, Change and Development	PEC	3	3	0	0	3
5	21MB3320	Negotiation and Conflict Management	PEC	3	3	0	0	3
6	21MB3321	Reward and Compensation management	PEC	3	3	0	0	3

7	21MB3322	International Human Resource Management	PEC	3	3	0	0	3
8	21MB3323	Human Resource Analytics	PEC	3	3	0	0	3
9	21MB3324	Training and Development	PEC	3	3	0	0	3
10	21MB3325	Learning and Development	PEC	3	3	0	0	3
11	21MB3326	People Analytics	PEC	3	3	0	0	3
12	21MB3327	Performance Management	PEC	3	3	0	0	3
13	21MB3328	Talent Acquisition and Management	PEC	3	3	0	0	3

Stream/ Specialization: Operations (7 subjects)

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	21MB3331	Supply Chain Management	PEC	3	3	0	0	3
2	21MB3332	Quality Management	PEC	3	3	0	0	3
3	21MB3333	Materials Management	PEC	3	3	0	0	3
4	21MB3334	Services Operations Management	PEC	3	3	0	0	3
5	21MB3335	Supply Chain Analytics	PEC	3	3	0	0	3
6	21MB3336	Project Management	PEC	3	3	0	0	3
7	21MB3337	Logistics Management	PEC	3	3	0	0	3
8	21MB3338	Design Thinking	PEC	3	3	0	0	3
9	21MB3339	New Product Development	PEC	3	3	0	0	3
10	21MB3340	Total Productive Maintenance and Lean Management	PEC	3	3	0	0	3

Stream/ Specialization: Marketing (8 subjects)

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	21MB3346	Retail Marketing	PEC	3	3	0	0	3
2	21MB3347	Consumer Behavior	PEC	3	3	0	0	3
3	21MB3348	Integrated Marketing Communication	PEC	3	3	0	0	3
4	21MB3349	Services Marketing	PEC	3	3	0	0	3
5	21MB3350	Sales and Distribution Management	PEC	3	3	0	0	3
6	21MB3351	Product and Brand Management	PEC	3	3	0	0	3
7	21MB3352	Digital Marketing	PEC	3	3	0	0	3
8	21MB3353	Marketing Analytics	PEC	3	3	0	0	3
9	21MB3354	Marketing Logistics	PEC	3	3	0	0	3
10	21MB3355	Inbound Marketing	PEC	3	3	0	0	3
11	21MB3356	Customer Relationship	PEC	3	3	0	0	3

Stream/ Specialization: Business Analytics (6 subjects)

S.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	21MB3361	Deep Learning and Artificial Intelligence	PEC	3	3	0	0	3
2	21MB3362	Social Media Web Analytics	PEC	3	3	0	0	3
3	21MB3363	Big Data Analytics	PEC	3	3	0	0	3
4	21MB3364	Data Mining for Business Intelligence	PEC	3	3	0	0	3
5	21MB3365	R Programming	PEC	3	3	0	0	3
6	21MB3366	Python Programming	PEC	3	3	0	0	3

7	21MB3367	Artificial Intelligence for Business	PEC	3	3	0	0	3
8	21MB3368	Machine Learning for Business	PEC	3	3	0	0	3

S.No.	Subject Area	Credits Per Semester								Credits Total	Percentage %
	Semester	I	II	III	IV	V	VI	VII	VIII		
1.	Professional Core Course [PCC]	23	20	6	-	-	-	-	-	49	52
2.	Professional Elective Course [PEC]	-	3	18	-	-	-	-	-	21	22
3.	Employability Enhancement Course [EEC]	4	4	4	12	-	-	-	-	24	26
	Total	27	27	28	12	-	-	-	-	94	100

21MA3101	STATISTICS FOR MANAGEMENT	L	T	P	C
		3	1	0	4

OBJECTIVES: To impart Knowledge on the following topics:

- To introduce students to the fundamental concepts of statistics, such as data types, measures of central tendency and dispersion, probability theory, sampling techniques, and hypothesis testing.
- To learn the applications of statistics in business decision making.
- Introduce students to the principles of statistical inference includingestimation and hypothesis testing.

UNIT - I	INTRODUCTION	12

Basic definitions and rules for probability, conditional probability independence of events, Bayes 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. Onesample run test.

UNIT - V	CORRELATION AND REGRESSION	12

Correlation – Coefficient of Determination – Rank Correlation – Regression – Estimation of Regression line – Method of Least Squares – Standard Error of estimate.

TOTAL: 60 PERIODS

OUTCOMES:

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

1.	Apply the basic concepts of random variables and probability theory to solve industrial problems
2.	Apply the concept of sampling distribution and estimation theory in industrial production and forecasting
3.	Apply hypothesis for various researchquestions or business scenarios.
4.	Evaluate the principles andconcepts underlying non-parametric tests.
5.	Apply how to identify situations where non-parametric tests areappropriate.
6.	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, 7th Edition, 2016.
2.	Aczel A.D. and Sounderpandian J., "Complete Business Statistics", 6th edition, Tata McGraw Hill Publishing Company Ltd., New Delhi, 2012.
REFERENCES:	
1.	Prem.S.Mann, Introductory Statistics, 7th Edition, Wiley India, 2016.
2.	Gareth James, Daniela Witten, Trevor Hastie, Robert Tibshirani, An Introduction to Statistical Learning with Applications in R, Springer, 2016.
3.	Anderson D.R., Sweeney D.J. and Williams T.A., Statistics for business and economics, 11th edition, Thomson (South – Western) Asia, Singapore, 2012.
4.	Srivatsava TN and Shailaja Rego, Statistics for Management, Tata McGraw Hill, 2008.
5.	N. D. Vohra, Business Statistics, Tata McGraw Hill, 2012.
6.	Ken Black, Applied Business Statistics, 7th Edition, Wiley India Edition, 2012.

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

21MB3102	MANAGEMENT CONCEPTS & ORGANIZATIONAL BEHAVIOR	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

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

UNIT - I	INTRODUCTION TO MANAGEMENT	9

Management: meaning, levels, management as an art or science, Managerial functions and Roles of a manager, Managerial Skills - Evolution of management thought: Classical Era (Contributions of F.W.Taylor & Henry Fayol), Neo-Classical Era (Mayo & Hawthorne Experiments), and Modern Era (system & contingency approach).

UNIT - II	PLANNING & ORGANIZING	9

Planning: Nature, purpose, steps in Planning process, Scope, Limitations, Types of plans, Characteristics of a sound Plan - Management by Objective (MBO) - Strategies & Policies - Decision Making: Types, Techniques and Processes.
Organizing: Organization structure, Authority and Responsibility Relationships, Delegation of Authority and Decentralization, Formal and informal organization, Departmentalization. Control: meaning, function, Process and types of Control.

UNIT - III	INDIVIDUAL BEHAVIOUR	9

Organizational Behavior: Meaning, contributing disciplines, importance - Perception and Learning - Personality and Individual Differences - Motivation theories and Job Performance - Values, Attitudes and Beliefs - Communication: Types, Process, Barriers and Making Communication Effective.

UNIT - IV	GROUP BEHAVIOUR	9

Groups and Teams: Definition, Difference between groups and teams, Stages of Group Development, Group Cohesiveness, Types of teams, Group Dynamics - Leadership: Styles & Approaches - Power and Politics - Organizational Climate - Conflict: Concept, Sources, Types, Management of conflict - Organizational Change and Development.

UNIT - V	EMERGING ASPECTS OF ORGANIZATIONAL BEHAVIOUR	9

Comparative Management Styles and approaches: American & Japanese Management Practices -Organizational Creativity and Innovation - Organizational Culture: OB across cultures, Conditions affecting cross cultural organizational operations, Managing International Workforce, Cross cultural communication, Management of Diversity.

TOTAL: 45 PERIODS

OUTCOMES:	
On successful completion of the course student will be able to:	
1.	Summarize the various management concepts and skills required in the business world.
2.	Apply the various functions of management in a real time management context.
3.	Analyze the complexities associated with management of individual behavior in the organizations.
4.	Evaluate the significance of employee motivation and communication in organizational productivity.
5.	Apply the skillset to manage group behavior in Organizations.
6.	Analyze the current trends in managing organizational behavior.
TEXT BOOKS:	
1.	Andrew J. Dubrin, Essentials of Management, Thomson Southwestern, 9th Edition, 2012.
2.	Harold Koontz and Heinz Weihrich, Essentials of Management: An International & Leadership Perspective, 9th edition, Tata McGraw-Hill Education, 2012.
3.	Stephen P. Robbins, David A.DeCenzo and Mary Coulter, Fundamentals of management, Prentice Hall of India, 2012.
4.	Robbins.S. Organisational Behaviour, X edn., Prentice-Hall, India.
5.	Fred Luthans, Organisational Behavior, McGraw Hill, 12th Edition, 2013.
REFERENCES:	
1.	Samuel C. Certo and Tervis Certo, Modern management: concepts and skills, Pearson education, 12th edition, 2012.
2.	Charles W.L Hill and Steven L McShane, Principles of Management, McGraw Hill. Education, Special Indian Edition, 2007.
3.	Durai, P. (2015). Principles of Management, Text and Cases. New Delhi: Pearson Education.
4.	Heinz Weihrich, Mark V Cannice and Harold Koontz, Management- A global entrepreneurial perspective, Tata McGraw Hill, 12th edition, 2008.
5.	Nelson, Quick, Khandelwal. ORGB – An innovative approach to learning and teaching. Cengage learning. 2nd edition. 2012.
6.	Robert Konopaske, John M Ivancevich, Michael T Matteson, Oranizational Behavior and Management, 11th edition, Tata McGraw Hill, 2017.
ONLINE COURSES / RESOURCES:	
1.	https://onlinecourses.swayam2.ac.in/cec20_mg03/preview
2.	https://www.mooc-list.com/course/organizational-behavior-managing-people-coursera

CO \ PO	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

21MB3103	MANAGERIAL ECONOMICS	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- To enable the students to understand the Economic concept to analyse business
- To enable the students to analyse and understand the consumer and producer behaviour.
- To enable the students to understand the features and forms of products market and factor market.
- To impart knowledge about Macro economic principles and policies.
- To explain demand and supply of money and determinants of money supply

UNIT - I	INTRODUCTION	9

Concept of Economy, Economics, Types - Microeconomics, Macroeconomics. Nature and Scope of Managerial Economics, Managerial Economics and decision-making. The themes of economics – scarcity and efficiency – three fundamental economic problems – society's capability – Production possibility frontiers (PPF) – Productive efficiency Vs economic efficiency – economic growth & stability - the role of markets and government – Externalities.

UNIT - II	CONSUMER AND PRODUCER BEHAVIOUR	9

Market – Demand and Supply – Determinants – Market equilibrium – elasticity of demand and supply – consumer behaviour: Utility – Meaning, Utility analysis, Measurement of utility, Law of diminishing marginal utility, Indifference curve, consumer equilibrium – Approaches to consumer behaviour. Production – Short-run and long-run Production Function – Returns to scale – economies Vs diseconomies of scale – Analysis of cost – Short-run and long-run cost function – Relation between Production and cost function.

UNIT - III	PRODUCT AND FACTOR MARKET	9

Product market – perfect and imperfect market – different market structures – Firm‟s equilibrium and supply, Price Determination under Perfect Competition, Price-Output Determination under Perfect Competition, Pricing Under Imperfect Competition – Market efficiency – Economic costs of imperfect competition. Factor market – Land, Labour and capital – Demand and supply – determination of factor price – Interaction of product and factor market – General equilibrium and efficiency of competitive markets.

UNIT - IV	PERFORMANCE OF AN ECONOMY – MACRO ECONOMICS	9

Macro Economics -Economic aggregates – circular flow of macroeconomic activity – National income determination – Aggregate demand and supply – Macroeconomic equilibrium – Components of aggregate demand and national income – Multiplier, Accelerator, Multiplier effect – Demand side management – Fiscal policy in theory.

UNIT - V	AGGREGATE SUPPLY AND THE ROLE OF MONEY	9

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

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Remember the Economic concept to analyze Businesses and be familiar with micro-economics terms.
2.	Analyse and understand the consumer and producer behavior from a managerial perspective.
3.	Examine the forms of products market and identify the various issues in an economics context.
4.	Summarize the features of factor market and demonstrate their significance from the perspective of business decision making.
5.	Comprehend the knowledge about Macro economic principles and policies and its real time impact on economy.
6.	Analyse the macroeconomics trends in business and assess their impact on business enterprises.

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, Textbook of economics, Biztantra,9th Edition , 2012.
3.	Managerial Economics: Concepts and Applications (SIE), THOMAS & MAURICE, McGrawHill Education.

REFERENCES:

1.	N. Gregory Mankiw, Principles of Economics, 7th edition, Cengage, New Delhi, 2017.
2.	Richard Lipsey and Alec Charystal, Economics, 12th edition, Oxford, University Press, New Delhi, 2011.
3.	Managerial Economics, D.N.Dwivedi, Vikas Publication.

CO \ PO	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

21MB3104	ACCOUNTING FOR DECISION MAKING	L	T	P	C
		3	1	0	4

OBJECTIVES: To impart Knowledge on the following topics:

- To introduce complex problems of financial accounting such as valuation, measuring and reporting issues related to assets and liabilities and preparing the financial statements.
- To gain the ability of using accounting information as a tool in applying solutions for managerial problems, evaluating the financial performance, and interpreting the financial structure.

UNIT - I	FINANCIAL ACCOUNTING	12

Conceptual Framework of Accounting: Users of Financial Statements; Capital of a Firm; Structure of Business Firms; Objectives of Corporate Financial Reporting; Components of Financial Statements; Accounting Conventions; Qualitative Characteristics of Financial Statements; True and Fair View; and Accounting Policy and Accounting Standards; Accounting Standards Disclosure of Accounting Policies (AS1). Accounting Records and Systems: (Journal, Cash Book, General Ledger, Trial Balance) Balance Sheet: Accounting Equation; Balance Sheet Structure; Assets; Current Assets; Non- Current Assets; Classification of Assets; Liabilities; Current Liabilities; Non-Current Liabilities; Secured and Unsecured Liabilities; Classification of Liabilities; Accounting Standards Contingencies and Events Occurring after the Balance Sheet Date (AS-4).

UNIT - II	ANALYSIS OF FINANCIAL STATEMENTS	12

Financial ratio analysis, Interpretation of ratio for financial decisions- Dupont Ratios – Comparative statements - common size statements. Cash flow (as per Accounting Standard 3 and Funds flow statement analysis – Trend Analysis.

UNIT - III	COST ACCOUNTING	12

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

UNIT - IV	MARGINAL COSTING AND DECISION MAKING	12

Marginal Costing and profit planning – Cost, Volume, Profit Analysis – Break Even Analysis – Decision making problems -Retain or replace and repair or renovate, Sell or further process, Incremental reasoning in pricing; product pricing; new product pricing, Product decisions - product modification decision; product elimination decision, product mix decision; product distribution decision. Relevant costs and irrelevant costs. Incremental analysis / differential costing as a tool of decision making: Pricing, Product Decisions.

UNIT - V	BUDGETING AND VARIANCE ANALYSIS	12

Budgetary Control: Budgets as Key to Planning & Control, Budgets, budgetary control, Budget preparation & monitoring procedures, Functional, Cash & Master Budget, Flexible Budgets. Standard costing and analysis of variances: Standard costing & budgetary control, Establishment of standard costs - keeping standards meaningful and relevant, Accounting for standard costs, Analysis of variances: Material, Labour, Overhead, and Profit. (Usage, Price, Volume & Sale Price variances	
TOTAL: 60 PERIODS	
OUTCOMES: On successful completion of the course student will be able to:	
1.	Apply grounding knowledge of financial accounting concepts.
2.	Analyze to prepare financial statement analysis.
3.	Analyze the concepts of management and cost accounting techniques.
4.	Apply marginal costing and profit planning process during decision making analysis.
5.	Assess the accountancy standards of practices across sectors.
6.	Analyze managerial decision using budgetary techniques.
TEXT BOOKS:	
1.	R. Narayanaswamy, Financial Accounting, PHI, sixth edition, 2017.
2.	M.Y. Khan & P.K. Jain, Management Accounting, Tata McGraw Hill, 8th edtion, 2018.
3.	T.S. Reddy & A. Murthy, Financial Accounting, Margham Publications, 2014.
4.	Ashish K. Battacharya, Introduction to Financial Statement Analysis, Elsiever, 2012.
REFERENCES:	
1.	Ashish K. Bhattacharya : Financial Accounting for Business Managers: Prentice-Hall of 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.	S.P.Jain, K.L.Narang, Simmi Agrawal : Accounting for Managers : Kalyani Publishers : Year of Publication 2006
WEB REFERENCES:	
1.	Accounting Coach(http://www.accountingcoach.com/
2.	Coursera(https://www.coursera.org/course/accounting
3.	Principles of Accounting(http://www.principlesofaccounting.com/
ONLINE COURSES / RESOURCES:	
1.	MIT Open CourseWare (http://ocw.mit.edu/courses/sloan-school-of-management/
2.	NJIT Open CourseWare (http://ocw.njit.edu/som/acct/acct-615-anandarajan/index.php

CO \ PO	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

21MB3105	LEGAL ASPECTS OF BUSINESS	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

	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, Formation of a contract, performance of contracts, breach of contract and its remedies, Quasi contracts. Contract of Agency: Nature of agency, Creation and types of agents, Authority and liability of Agent and principal: Rights and duties of principal and agents, termination of agency.

THE SALE OF GOODS ACT 1930

Nature of Sales contract, Documents of title, risk of loss, Guarantees and Warranties, performance of sales contracts, conditional sales and rights of an unpaid seller. Negotiable Instruments Act 1881: Nature and requisites of negotiable instruments. Types of negotiable instruments, liability of parties, holder in due course, special rules for Cheque and drafts, discharge of negotiable instruments.

UNIT - II	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 - III	INDUSTRIAL LAW	9

An overview of Factories Act, Payment of Wages Act, Payment of Bonus Act - Industrial Disputes Act.

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	CONSUMER PROTECTION ACT AND INTRODUCTION OF CYBER LAWS	9

Consumer Protection Act – Consumer rights, Procedures for Consumer grievances redressal, Types of consumer Redressal Machineries and Forums- Competition Act 2002- Cybercrimes, IT Act 2000 and 2002, Cyber Laws, Introduction of IPR Intellectual Property Laws- Introduction, Legal Aspects of Patents, Filing of Patent Applications, Rights from Patents, Infringement of Patents, Copyright and its Ownership, Infringement of Copyright, Civil Remedies for Infringement. – Copy rights, Trade marks, Patent Act. Introduction, Right to Information Act, 2005.

	TOTAL: 45 PERIODS
OUTCOMES: On successful completion of the course student will be able to:	
1.	Comprehend the fundamental legal principles in developing various contracts and commercial laws in the business world.
2.	Interpret the various forms of business associations and elements of Corporate Governance.
3.	Understand the laws related to industrial environment.
4.	Apply the guidelines of Corporate Tax and Goods and Services Tax.
5.	Summarize the Consumer Protection Act.
6.	Interpret Cyber Laws and Intellectual Property Rights for evolving businesses.
TEXT BOOKS:	
1.	N. D. Kapoor, Elements of Mercantile Law, Sultan Chand and Company, India, 2017.
2.	P. K. Goel, Business Law for Managers, Biztantatara Publishers, India, 2017.
3.	Akhileshwar Pathak, Legal Aspects of Business, Tata McGraw Hill, 6th Edition 2018.
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.
REFERENCES:	
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- Copy Rights, Trade Marks, 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.
6.	V.S. Datey, GST Ready Reckoner, 9 th edition, 2019.
ONLINE COURSES / RESOURCES:	
1.	https://onlinecourses.nptel.ac.in/noc21_mg96/preview

CO	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

21MB3106	INFORMATION MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

●	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 learn about the case tools and UML diagram and its types.
●	To understand database management system.
●	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	9

Data, Information, Intelligence, Information Technology, Information System, Evolution, Types based on Functions and Hierarchy, Functional Information Systems, DSS, EIS, KMS, GIS, Expert system. System Development Methodologies: Waterfall, Spiral, Agile.

UNIT - II	SYSTEM ANALYSIS AND DESIGN	9

Case Tools: System flow chart, Decision table, Data flow Diagram (DFD), Entity Relationship (ER), Object Oriented Analysis and Design (OOAD), UML diagram.

UNIT - III	DATABASE MANAGEMENT SYSTEMS	9

DBMS: HDBMS, NDBMS, RDBMS, OODBMS, SQL: Query Processing, Concurrency Management, Big Data -Hadoop Architecture. Data Warehousing and Data Mart.

UNIT - IV	SECURITY, CONTROL AND REPORTING	9

Security, Testing, Error Detection, Controls, IS Vulnerability, Disaster Management, Computer Crimes, Securing the Web, Intranets and Wireless Networks, Software Audit, Ethics in IT, User Interface and Reporting.

UNIT - V	NEW IT INITIATIVES	9

Role of Information Management in ERP, E-business, E-governance, Data Mining, Business Intelligence, Pervasive Computing, Cloud Computing – Artificial Intelligence – Block Chain Technology – Robotic Process Automation. Machine Learning.

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Describe the basic concepts of data, types of information system & its application in Business.
2.	Apply knowledge of the system development methodologies.

3.	Comprehend the skill of case tools and UML diagram.
4.	Analyze the current trends in database management system and its applications.
5.	Analyze various technologies in information system and its security.
6.	Evaluate the knowledge on effective application of information systems in business.
TEXT BOOKS:	
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.	James O Brien, Management Information Systems – Managing Information Technology in the E-business enterprise, Tata McGraw Hill, 2004.
REFERENCES:	
1.	Raplh Stair and George Reynolds, Information Systems, Cengage Learning, 10th Edition, 2012
2.	Frederick Gallegor, Sandra Senft, Daniel P. Manson and Carol Gonzales, Information Technology Control and Audit, Auerbach Publications, 4th Edition, 2013.
ONLINE COURSES / RESOURCES:	
1.	https://onlinecourses.nptel.ac.in/noc21_mg89/preview.

CO \ PO	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	-	-

21MB3107	MARKETING MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- To provide an insight on the ideas and nuances of modern marketing through a systematic framework for understanding marketing management.
- Better understanding of the various strategies pertaining to marketing mix elements.
- The course should provide students with a clear understanding of the marketing mix, which includes the four Ps: product, price, place, and promotion.
- Provide students with a comprehensive understanding of buyer behavior and its significance in marketing.
- To keep students updated on the latest marketing trends and equip them with the knowledge and skills needed to adapt to the evolving marketing landscape.
- To provide an insight on the ideas and nuances of modern marketing through a systematic framework for understanding marketing management.

UNIT - I	MARKETING FOR THE 21st CENTURY	9

Marketing – Definitions - Conceptual frame work – Core Concepts of Marketing – Marketing environment: Internal and External - Marketing for the Millennials- The New Marketing Realities- Difference between Marketing and Selling- Holistic Marketing Concepts - Relationship marketing,- Performance marketing -Integrated Marketing -Internal Marketing- Delivering and Communicating Value to the Customers.

UNIT - II	MARKETING STRATEGY	9

Marketing strategy formulations – Key Drivers of Marketing Strategies - Strategies for Industrial Marketing – Consumer Marketing — Services marketing – Competitor analysis - Analysis of consumer and industrial markets –Rural Marketing - Marketing in global environment – Prospects and Challenges.

UNIT - III	MARKETING MIX DECISIONS	9

Market Segmentation – Targeting and Positioning - Marketing Mix elements - Product planning and development – Product life cycle – New product Development and Management- Pricing Objectives, Policies and methods- Channel Management – The role of marketing channels- Vertical horizontal and multichannel marketing systems – Managing Integrated Marketing channels – Retailing, and wholesaling - Integrated Marketing Communication - Marketing Communication Process- Promotion mix – Advertising and Sales Promotion.

UNIT - IV	BUYER BEHAVIOUR	9

Understanding industrial and individual buyer behavior - Influencing factors – Buyer Behaviour Models – Online buyer behaviour - Building and measuring customer satisfaction – Customer relationships management – Customer acquisition, Retaining, Defection.

UNIT - V	CURRENT TRENDS IN MARKETING	9

Marketing Information System – Marketing Research – Concepts and applications- Causerelated marketing – Ethical Issues in marketing - Digital Marketing – Emerging Online marketing trends in the current scenario.	
TOTAL: 45 PERIODS	
OUTCOMES: On successful completion of the course student will be able to:	
1.	Describe Practical application of contemporary marketing theories to the demandsof business environment.
2.	Comprehend the enhancement of knowledge and understanding of marketing strategies to be implemented for consumer and industrial marketing to have a competitiveedge.
3.	Apply the effective usage of the various marketing mix elements and management of integrated marketing channels.
4.	Analyze the nature of consumer buying behaviour through the various influencing factors.
5.	Analyze the marketing research and awareness towards the current marketing practices at the domestic.
6.	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.	Kotler, Keller, Koshy, Jha, (2008), Marketing Management- A South Asian Perspective, Pearson India Pvt. Ltd.
3.	KS Chandrasekar, "Marketing management-Text and Cases", Tata McGraw Hill Education, 2012.
REFERENCES:	
1.	Ramasamy, V.S, Namakumari, S, Marketing Management: Global Perspective Indian Context, Macmillan Education, New Delhi, 6 th edition, 2018.
2.	Micheal R.Czinkota, Masaaki Kotabe, Marketing Management, Vikas Thomson Learning, 2nd edition 2006.
WEB REFERENCES:	
1.	https://unbounce.com/content-marketing
2.	https://www.worldsupporter.org

CO \ PO	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

21MB3108	INDIAN ETHOS AND BUSINESS ETHICS	L	T	P	C
		0	0	4	2

OBJECTIVES: To impart Knowledge on the following topics:

- The course aims to provide students with an understanding of the philosophical and cultural principles that shape Indian ethos.
- Course may cover the influence of spiritual traditions and practices, such as yoga, meditation, and mindfulness, on Indian ethos and business ethics.
- Students will examine case studies and examples of ethical leadership in both traditional and modern Indian businesses.
- Explore issues such as corruption, bribery, environmental sustainability, labor rights, and gender equality, and discuss strategies for addressing these challenges.
- Students will develop skills in applying ethical frameworks, conducting ethical assessments, and proposing ethical solutions aligned with Indian ethos.
- The course aims to provide students with an understanding of the philosophical and cultural principles that shape Indian ethos.

UNIT - I		12

- Indian Ethos and Personality Development
- Work ethos and values for Professional Managers

UNIT - II		12

- Indian Values, Value Systems and Wisdom for modern managers
- Management Lessons from the Vedas, Puranas, Indian religions

UNIT - III		12

- Spirituality in Business Management
- Individual Culture and Ethics

UNIT - IV		12

- Ethical codes of conduct and value Systems
- Loyalty and Ethical Behaviour.

UNIT - V		12

- Ethical business issues and solutions
- Social Responsibilities of Business

TOTAL: 60 PERIODS

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

1.	Comprehend the basic concepts of Indian ethos and value systems at work.
2.	Summarize issues of business ethics and offer solutions in ethical perspectives.
3.	Analyze professionally efficient and skillful in value systems and culture.

4.	Remembering the influence of spirituality on individual values, beliefs, and ethical behavior.
5.	Summarize an ethically manage business towards well-being of the Society.
6.	Understand socially effective in undertaking business responsibilities.
TEXT BOOKS:	
1.	"Indian Ethos and Values for Managers" by N.S. Rao.
2.	"Indian Ethos in Management" by S.L. Gupta and V.S. Gupta.
3.	"Indian Ethos and Values: A Holistic Management Approach" by V. H. Rao.
4.	"Ethics and Indian Management: Emerging Perspectives" edited by B.N. Patnaik.
5.	"Business Ethics: Concepts, Cases, and Indian Perspectives" by A.C. Fernando.
6.	"Indian Business Ethics: Insights and Practices" by Atanu Adhikari.
7.	"Ethics and Excellence: Cooperation and Integrity in Business" by Robert C. Solomon.
8.	"Business Ethics: A Kantian Perspective" by Norman E. Bowie.
9.	"Spirituality, Ethics, and Care: Exploring the Intersection" edited by David B. Couturier and Thomas D. Faucher.

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

21MB3109	BUSINESS COMMUNICATION FOR MANAGERS	L	T	P	C
		0	0	4	2

OBJECTIVES: To impart Knowledge on the following topics:

- To help students to acquire some of the necessary skills to handleday-to-day managerial roles and responsibilities.
- Students will study different writing models and formats commonly used in business communication.
- Students will learn the appropriate etiquette and professional conduct expected during job interviews.
- 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.

UNIT - I	INTRODUCTION AND TYPES OF BUSINESS COMMUNICATION	10

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	15

The strategies to learn the art of writing E-mails, minutes, Reports of different kinds Proposals, Memorandums, Profile of institutions, 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, Captions, Preparing Press Release and Press Notes.

UNIT - III	EFFECTIVE PRESENTATIONS	10

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

UNIT - IV	INTERVIEW SKILLS	15

Mastering the art of giving interviews in - selection or placement interviews, discipline interviews, appraisal interviews, exit interviews, web /video conferencing, tele-meeting. Skillset 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 & EFFECTIVE WRITING FOR MEDIA	10

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 (Newspapers, magazines, newsletters, notice-board).	
TOTAL: 60 PERIODS	
OUTCOMES: On successful completion of the course student will be able to:	
1.	Develop good managerial communication skills.
2.	Summarize different forms of written communication required in a business context.
3.	Develop good presentation skills
4.	Create In-depth understanding of interview skills.
5.	Comprehend the ability to prepare Business reports.
6.	Develop the learners to speak fluently and flawlessly in all kinds of communicative contexts with all nationalities.
REFERENCES:	
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.	Meenakshi Raman, Prakash Singh, Business Communication by, Oxford, 2nd edition, 2012.
6.	Raymond V. Lesikar, Flatley, Basic Business Communication Skills for Empowering the Internet Generation by, M.E., TMGH , New Delhi , 10th edition, 2004.
WEB REFERENCES:	
1.	www.businesscommunicationskills.com
2.	www.businesscmmunication.org.
3.	https://learnenglishteens.britishcouncil.org/exams/grammar-and-vocabulary exams/word- formation.
4.	https://cdn.s3waas.gov.in/s347d1e990583c9c67424d369f3414728e/uploads/ 2018/02/2018 031621.pdf

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

21MB3201	QUANTITATIVE TECHNIQUES FOR DECISION MAKING	L	T	P	C
		3	1	0	4

OBJECTIVES:

- To apply quantitative techniques in modeling and solving business related problems
- Impart comprehensive knowledge and understanding of advanced theoretical fundamentals in Operational Research
- Learn how to construct mathematical models that represent real-world decision problems accurately and effectively.
- Learn different optimization methods, such as linear programming, integer programming, and nonlinear programming, to maximize or minimize objectives in decision problems.
- Develop an understanding of decision analysis techniques, including decision trees, expected value, and utility theory, to make informed decisions under uncertainty.

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. Integer programming problem (IPP):- Introduction, solution of IPP using Graphical method and Gomory‟s Method. Revised simplex method.

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.

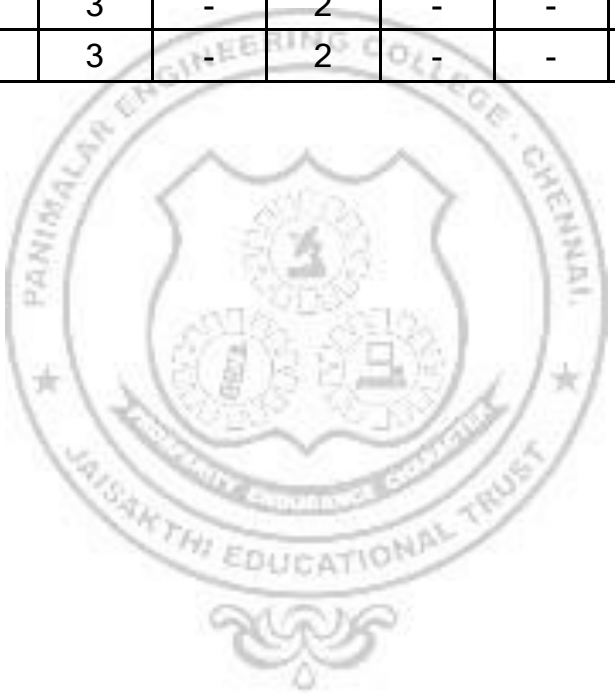
UNIT - IV	INVENTORY AND JOB SEQUENCING MODELS	12

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

UNIT - V	QUEUING THEORY AND REPLACEMENT MODELS	12

Queuing Theory - single and Multi-channel models – infinite number of customers and infinite calling source. Replacement Models-Individuals replacement Models (With and without time value of money) – Group Replacement Models.	
TOTAL: 60 PERIODS	
OUTCOMES: On successful completion of the course student will be able to:	
1.	Comprehend the principles of Linear programming in product mix decisions
2.	Apply transportation networks factors such as costs, Capacities, constraints and demands.
3.	Apply assignment models optimization techniques such as Hungarian algorithm to solve assignment problems efficiently and effectively.
4.	Analysis various techniques such as Game theory and decision making under risk and certainty, uncertainty.
5.	Solutions of various s job sequencing techniques and apply in real time decision making.
6.	Evaluate the allocation of scarce resources using Queuing and replacement theories in real time scenario.
TEXT BOOKS:	
1.	Quantitatve techniques For Decision Making – Anand Sharma, Himalaya publishing house.
2.	Quantitatve TechniquesFor Decision Making - M.P Gupta And R.B Sharma 4th Edition, Prentice Hall India Private Limited.
REFERENCES:	
1.	N. D Vohra, Quantitative Techniques in Management, TataMcgraw 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.

CO \ PO	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



21MB3202	FINANCIAL MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- 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 the working capital management and make them to forecast
- To Explain various sources of finance and basic knowledge about capital markets

UNIT - I	FOUNDATIONS OF FINANCE	9

Introduction to finance - Financial Management – Nature, scope and functions of Finance, organization of financial functions, objectives of Financial management, Major financial decisions – Time value of money – Future and present value of securities – Concept of risk and return.

UNIT - II	INVESTMENT DECISIONS	9

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

UNIT - III	FINANCING AND DIVIDEND DECISION	9

Capital structure – Theories – Features and Approaches of capital structure – Determinants of Capital structure. Leverages - Operating and Financial leverage - measurement of leverages – degree of Operating & Financial leverage – Combined leverage, EBIT – EPS Analysis- Indifference point. (simple Problems). Dividend decision- Issues in dividend decisions, Importance, Relevance & Irrelevance theories – Walter's Model, Gordon's model and MM model. (Simple Problems) – Factors determining dividend policy – Types of dividend policies – forms of dividend.

UNIT - IV	WORKING CAPITAL MANAGEMENT	9

Meaning of working capital: Concepts, Types, Needs, Determinants, issues and estimation of working capital (Problems) - Accounts Receivables Management and factoring – Inventory management – Cash management – Working capital finance: Trade credit, Bank finance and Commercial paper.

UNIT - V	LONG TERM SOURCES OF FINANCE	9

Indian capital and stock market, New issues market. Sources of Long- term finance: Shares, debentures and term loans, lease Finance, hire purchase, venture capital financing.

	TOTAL: 45 PERIODS
OUTCOMES: On successful completion of the course student will be able to:	
1	Comprehend the basic concepts of Financial management and applying to take managerial decisions making.
2	Apply the various techniques of Managing finance in an organization and explore certain issues in Capital budgeting.
3	Evaluate the relationship between capital structure and cost of capital
4	Comprehend the aspects of dividend decision and determinants of appropriate Dividend Policy
5	Analyze the importance of working capital management and forecast the Requirements of working capital.
6	Summarize the characteristics of various sources of long-term financing.
TEXT BOOKS:	
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.
REFERENCES:	
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.

CO \ PO	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

21MB3203	HUMAN RESOURCE MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- The course aims to introduce students to the field of human resource management and provide an understanding of its strategic significance in organizations.
- To familiarize students with the theoretical frameworks, models, and concepts that underpin effective HRM practices
- Involve examining case studies, discussing contemporary HRM issues, and applying HRM theories and concepts to practical scenarios.
- Develop students' skills in assessing an organization's workforce needs, conducting job analysis, and implementing effective recruitment and selection strategies to attract and retain talented individuals
- Teach students how to establish performance expectations, conduct performance appraisals, provide feedback, and implement performance improvement strategies.

UNIT - I	PERSPECTIVES IN HRM	8

HRM: Evolution of HRM, Concept, Nature, Scope, Objectives and Functions of Human Resource Management - Challenges of HRM: Environmental, Organizational and Individual - Role of HR manager - HR policies - Emerging trends of HRM in globalized economy and cross cultural environment.

UNIT - II	HR PLANNING	9

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 - induction - Socialization benefits.

UNIT - III	TRAINING AND EXECUTIVE DEVELOPMENT	8

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

UNIT - IV	COMPENSATION & PERFORMANCE EVALUATION	10

Compensation: Concepts, Types, Factors determining compensation, Compensation plan, and Reward. Performance evaluation: Methods of performance evaluation, Feedback, Industry practices: Promotion, Demotion, Transfer and Separation.

UNIT - V	FUTURE OF WORK PLACE	10

Career management – Development of mentor – Protégé relationships - Implication of job change. Emerging Trends in HR: CSR, Green HR, Work Life Balance (WLB), Computer applications in HRM, HR and Artificial Intelligence (AI).

TOTAL: 45PERIODS

OUTCOMES:

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

1	Students will gain knowledge and skills needed for success as a HR professional.
2	Students would understand the significance of talent acquisition in organizations and the need to enhance individual talent.
3	Enhance knowledge and influence of training and development towards workplace Productivity.
4	Expose the students to understand the various areas of self-development.
5	Students would have understood how performance is evaluated in organizations and the issues related to putting up theory into practice in the workplace.
6	Students would be aware of the emerging concepts in the field of HRM.
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: TataMcGraw-Hill.
6	David A. DeCenzo& Stephen P.Robbins, Personnel/Human Resource Management, Third edition, PHI/Pearson, 2006.
7	VSP Rao, Human Resource Management: Text and cases, 3rd Edition, Excel Books, New Delhi - 2010.
REFERENCES:	
1	Luis R.Gomez-Mejia, David B.Balkin, Robert L Cardy. Managing Human Resource. PHI Learning. 2012.
2	Bernadin , 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&AssissiMenacheri, 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	Jhon 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.
WEB REFERENCES:	
1.	https://www.coursera.org/specializations/human-resource-management

2.	https://www.futurelearn.com/courses/introduction-to-engagement-and-motivation-at-work
3.	https://onlinecourses.nptel.ac.in/noc20_mg15/preview

CO \ PO	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	-

PANIMALAR ENGINEERING COLLEGE, CHENNAI.
JAISAKTHI EDUCATIONAL TRUST

21MB3204	OPERATIONS MANAGEMENT	L	T	P	C
		3	1	0	4

OBJECTIVES:

- Provide students with an overview of operations management as a discipline, its significance in organizations, and its role in achieving organizational goals.
- Enable students to understand the principles of capacity planning and management, including techniques for forecasting demand, determining capacity requirements, and optimizing resource allocation.
- Explore tools and methodologies such as total quality management (TQM), statistical process control (SPC), and Six Sigma for improving and maintaining quality.
- Familiarize students with the concept of operations strategy and its alignment with overall business strategy.

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; World- class manufacturing practices.

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

UNIT - III	DESIGNING OPERATIONS	15

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

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 - Theory of constraints - bottlenecks, capacity constrained resources, synchronous manufacturing

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.

TOTAL: 60 PERIODS

OUTCOMES: On successful completion of the course student will be able to:	
1	Comprehend the strategic importance of operations function leading to competitive advantage.
2	Understand facility alternatives (location and layout) and the capacity decisions.
3	Apply the various methods of Designing products and processes.
4	Deduce different plans for the operations
5	Apply techniques for forecasting and scheduling of jobs and services.
6	Comprehend OM practices to comply with quality standards.
TEXT BOOKS:	
1	Richard B. Chase, Ravi Shankar, F. Robert Jacobs, Operations and Supply Chain Management, McGraw Hill Education (India) Pvt. Ltd, 14th Edition, 2014.
2	Mahadevan B, Operations management: Theory and practice. Pearson Education India; 2015.
REFERENCES:	
1	William J Stevenson, Operations Management, Tata McGraw Hill, 9th Edition, 2009.
2	Russel and Taylor, Operations Management, Wiley, 5th Edition, 2006.
3	Norman Gaither and Gregory Frazier, Operations Management, South Western Cengage Learning,9th edition, 2015.
4	Cecil C. Bozarth, Robert B. Handfield, Introduction to Operations and Supply Chain Management, Pearson, 4th Edition, 2016.
5	Panneerselvam. R, Production and Operations Management, 3rd Edition,. PHI Learning, 2012.
WEB REFERENCES:	
1.	https://www.open.edu/openlearn/money-business/business-strategy-studies/introduction- operations-management/content-section-0
2.	https://courses.lumenlearning.com/wm-introductiontobusiness/chapter/facility-location- and-layout/
3.	https://www.designorate.com/stage-gate-new-product-development-process/
4.	https://pressbooks.senecacollege.ca/operationsmanagement/chapter/forecasting/
5.	https://www.isixsigma.com/
ONLINE COURSES / RESOURCES:	
1	https://alison.com/course/advanced-diploma-in-production-and-operation-management
2	https://www.ioscm.com/courses/manufacturing-courses/
3	https://www.edx.org/course/operations-management
4	https://www.classcentral.com/course/swayam-production-and-operation-management-17747

CO \ PO	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	-

21MB3205	BUSINESS RESEARCH METHODS	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To enable students to understand basic concepts of Research.
- To impart students with strategies for managing research
- To be equipped with scientific methodology in business inquiry and develop analytics skill in Business research
- To familiarize the students with application of statistical tools in business research
- To impart the skills for scientific communications in research and to prepare scientific business reports

UNIT - I	INTRODUCTION	8

Business Research – Definition and Significance – the research process – Types of Research – Research questions / Problems – Research objectives – Research hypotheses – the role of theory in research.

UNIT - II	RESEARCH DESIGN AND MEASUREMENT	12

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

UNIT - III	DATA COLLECTION	7

Types of data – Primary Vs Secondary data – Methods of primary data collection – Construction of questionnaire – Sampling plan – Sample size – determinants optimal sample size – sampling techniques – Probability Vs Non-probability sampling methods.

UNIT - IV	DATA PREPARATION AND ANALYSIS	12

Data Preparation – editing – Coding –Data entry – Validity of data - Normality test - test of unidimensionality - Multicollinearity – Qualitative Vs Quantitative data analyses – Multivariate statistical techniques – Exploratory Factor analysis & Confirmatory Factor Analysis – Discriminant analysis – cluster analysis – Conjoint Analysis – Introduction to Structured Equation Modelling - Application of statistical software for data analysis – MS Excel, SPSS, AMOS, R Analysis.

UNIT - V	REPORT DESIGN, WRITING AND ETHICS IN BUSINESS RESEARCH	6

Research report – Different types – Contents of report – the role of audience – ethics in research.

TOTAL: 45 PERIODS

OUTCOMES:

On successful completion of the course student will be

1	Explain the various stages of research process and types to solve business problems
2	Apply appropriate research design to address a specific research problem

3	Apply various measurement scales and instrument construction for a given business situation.
4	Analyze appropriate methods to collect qualitative and quantitative data for analysis.
5	Application of appropriate statistical tools for managerial decision making and hypothesis testing.
6	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 J K 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.
REFERENCES:	
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
ONLINE COURSES / RESOURCES:	
1.	https://onlinecourses.nptel.ac.in/noc21_hs85/preview
2.	https://onlinecourses.nptel.ac.in/noc21_ge15/preview
3.	https://onlinecourses.swayam2.ac.in/nou21_cm03/preview

CO \ PO	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

21MB3206	BUSINESS ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES:

- The course aims to provide students with a solid foundation in the principles and concepts of business analytics.
- Involve learning statistical techniques, data visualization, predictive modeling, and data mining methods.
- Course may aim to familiarize students with popular analytics tools such as Excel, SQL, R, Python, or Tableau, and provide hands-on experience in using these tools for data analysis and visualization.
- Emphasize developing critical thinking and problem-solving skills to help students analyze complex business situations, identify patterns, make data-driven decisions
- Aim to keep students informed about emerging trends, technologies, and best practices in the field, preparing them to adapt to the evolving analytics landscape.

UNIT - I	INTRODUCTION TO BUSINESS ANALYTICS (BA)	9

Business Analytics - Terminologies, Process, Importance, with Organizational Decision Making, BA for Competitive Advantage.

UNIT - II	MANAGING RESOURCES FOR BUSINESS ANALYTICS	9

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

UNIT - III	DESCRIPTIVE ANALYTICS	9

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

UNIT - IV	PREDICTIVE ANALYTICS	9

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

UNIT - V	PRESCRITIVE ANALYTICS	9

Introduction to Prescriptive analytics - Prescriptive Modeling - Non Linear Optimization - Demonstrating Business Performance Improvement.

TOTAL: 45 PERIODS

OUTCOMES:

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

1	Ability to understand the role of business analytics in decision making and problem solving to achieve the organizational goal.
2	Ability to use analytical tools and technology for to identify business opportunity.

3	Ability to apply descriptive analytics for to find new opportunities in organization and solve operational problem.
4	Understand predictive analytics and its application for finding future opportunities.
5	Knowledge of prescriptive analytics and demonstrating business process improvement and to understand optimal resource allocation for to increase business performance.
6	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.
REFERENCES:	
1	Marc J. Schniederjans, Dara G. Schniederjans and Christopher M. Starkey, " Business Analytics Principles, Concepts, and Applications - What, Why, and How", Pearson Ed, 2014.
2	Christian Albright S and Wayne L. Winston, "Business Analytics - Data Analysis and Decision Making", Fifth edition, Cengage Learning, 2015.
ONLINE COURSES / RESOURCES:	
1	https://online.hbs.edu/courses/business-analytics/
2	https://www.udemy.com/courses/business/analytics-and-intelligence/
3	https://online-learning.harvard.edu/course/business-analytics?delta=0
4	https://onlinecourses.nptel.ac.in/noc20_mg11/preview
5	https://onlinecourses.swayam2.ac.in/imb20_mg19/preview

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

21MB3214	DATA ANALYSIS AND BUSINESS MODELING	L	T	P	C
		0	0	4	2

OBJECTIVES: To impart Knowledge on the following topics:

- 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, 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.

S.No.	Exp. No.	Details of experiments	Duration
		Name	
1	1	Descriptive Statistics	4
2	2	Hypothesis – Parametric	4
3	3	Hypothesis – Non-parametric	4
4	4	Correlation & Regression	4
5	5	Forecasting	4
6	-	Extended experiment – 1	4
7	6	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 Modeling	4
13	11	Linear Programming	4
14	12	Inventory Models	4
15	-	Extended experiments – 3	4

OUTCOMES:

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

1	Comprehend the nature of data and conducting hypothesis testingusing various data analysis techniques.
2	Analyze and identify the relationship between variables using data analytical tools.
3	Apply the forecasting in real time business world using analytical tools.
4	Analyze to conduct Risk and sensitivity analysis based on business data.
5	Ability to conduct portfolio selection based on business data.
6	Apply networking, inventory models and queuingtheory 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, et al, „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 Modelling using MS Excel", PHI Learning private Ltd, 2017.
4	William J. Stevenson, Ceyhun Ozgur, „Introduction to Management Science with Spreadsheet", Tata McGraw Hill, 2009.
5	Wayne L. Winston, Microsoft Excel 2010: Data Analysis & Business Modeling, 3rd edition, Microsoft Press, 2011.
6	Vikas Gupta, Comdex Business Accounting with Ms Excel, 2010 and Tally ERP 9.0 Course Kit, Wiley India, 2012.
7	Kiran Pandya and Smriti Bulsari, SPSS in simple steps, Dreamtech, 2011.
8	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	-	2	-	3	-	-
CO2	1	-	-	-	-	3	-	2
CO3	-	3	-	1	-	3	-	2
CO4	-	1	-	-	-	2	-	-
CO5	2	1	-	-	-	3	-	-
CO6	3	2	-	1	-	3	-	2

21MB3215	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	

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:

6.	Common core curriculum for Rural Engagement, National council of Rural Institutes, MHRD, GOI.
7.	Katarsingh and Anil Shishodia, "Rural development: Principles, Policies and Management", Sage publications , 2016.
8.	A Azeez & S.M.J Akhtar, " Rural development in India", Kalpaz publications, 2016.
9.	Transforming rural India, Ministry of Rural Development, GOI.

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

21MB3207	ENTREPRENEURSHIP DEVELOPMENT	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- To equip and develop the learners entrepreneurial skills and qualities essential to undertake business.
- To impart the learners entrepreneurial competencies needed for managing business efficiently and effectively.

UNIT - I	ENTREPRENEURAL COMPETENCE	9

Entrepreneurship concept – Entrepreneurship as a Career – Entrepreneurial Personality - Characteristics of Successful Entrepreneurs – Knowledge and Skills of an Entrepreneur.

UNIT - II	ENTREPRENEURAL ENVIRONMENT	9

Business Environment - Role of Family and Society - Entrepreneurship Development Training and Other Support Organisational Services - Central and State Government Industrial Policies and Regulations.

UNIT - III	BUSINESS PLAN PREPARATION	9

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

UNIT - IV	LAUNCHING OF SMALL BUSINESS	9

Finance and Human Resource Mobilisation - Operations Planning - Market and Channel Selection - Growth Strategies - Product Launching – Incubation, Venture capital, Start-ups.

UNIT - V	MANAGEMENT OF SMALL BUSINESS	9

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

TOTAL: 45 PERIODS

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

1	Comprehend the entrepreneurial competence to run the business efficiently.
2	The learners are able to undertake businesses in the entrepreneurial environment
3	The learners are capable of preparing business plans and undertake feasible projects.
4	The learners are efficient in launching and develop their business ventures successfully.
5	The learners shall monitor the business effectively towards growth and development.

6	Capability to construct new paradigms by applying the acquired knowledge.
TEXT BOOKS:	
3.	S.S.Khanka, Entrepreneurial Development, S.Chand and Company Limited, New Delhi, 2016.
4.	R.D.Hisrich, Entrepreneurship, Tata McGraw Hill, New Delhi, 2018.
REFERENCES:	
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.
ONLINE COURSES / RESOURCES:	
1	https://onlinecourses.swayam2.ac.in/cec20_mg19/preview
2	https://online-learning.harvard.edu/subject/entrepreneurship
3	https://alison.com/courses/entrepreneurship
4	https://www.udemy.com/courses/business/entrepreneurship/
5	https://nptel.ac.in/courses/110/106/110106141/
6	https://nptel.ac.in/courses/110/107/110107094/
7	https://nptel.ac.in/courses/110/105/110105067/

	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	-

21MB3208	CORPORATE GOVERNANCE	L	T	P	C
		3	0	0	3

OBJECTIVES:

- This course will help to explore, recognize and understand the multiple paradoxes related to the study and application of corporate governance in organizations.
- The course will help to relate the corporate government practices of an organization to its performance
- To familiarize the students with the understanding of issues and practices of corporate governance in the global and Indian context.

UNIT - I	CONCEPTUAL FRAMEWORK OF CORPORATE GOVERNANCE	9

Understanding Corporate Governance: Corporate governance – an overview, History of corporate governance-Concept of corporations -Concept of extended view of corporate citizenship, Owners and stakeholders, Types of owners, Rights and privileges of shareholders (Fernando, 4), Ownership structures and corporate governance- Pyramids and Tunneling:- Issues of corporate control and cash flow rights- Examples from restructure proposals of Vedanta group -Need for investor protection

UNIT - II	THEORIES AND PRACTICE OF CORPORATE GOVERNANCE	9

Theory & practices of corporate governance, corporate governance mechanism and overview = Perspectives on Corporate Governance-Market and control model of governance chain - Global Corporate Governance Practices - Anglo-American Model - German Model - Japanese Model - Landmarks in Emergence of Corporate Governance- Board of Directors: Powerful Instrument of Governance - Types of Directors - Importance of Independent Directors

UNIT - III	ADMINISTRATIVE AND AUDIT MECHANISM	9

Board Committees and Chairman - Separation OF CEO & Board Chairman post – Nomination Committee - Board Selection - Boards Performance Evaluation-Executive Compensation - Role of Remuneration Committee - Human Side of Governance- Financial Oversight and Audit Mechanisms - Audit Committee - Disclosure mechanisms - Role of SEBI

UNIT - IV	GOVERNANCE METHODS AND RATING	9

Governance and Risk Management • Risk Management Committee - Corporate Misconduct & Misgovernance- Reasons for Corporate Misconduct - The Concept of whistle-blowing; types of whistle-blowers; whistle-blower policy; the whistle-blower legislation across countries; developments in India. Corporate Governance Rating • Standard & Poor's Corporate Governance Scores • Corporate Governance Rating Methodology (CRISIL)

UNIT - V	GOVERNANCE ISSUES AND PRACTICE	9

Governance of Financial Organizations & PSU‟s- Organizational patterns of PSU‟s - Powers of PSU Boards - Governance issues in Entrepreneurial Firms - Unique issues among entrepreneurial forms- Choosing Board of Directors and Venture capitalists - Role of venture capitalists and buy- outs- Corporate Governance in Practice - Governance issues in MNC‟s & Joint Ventures	
TOTAL: 45 PERIODS	
OUTCOMES: On successful completion of the course student will be able to:	
1	Comprehend the purpose and nature of corporations.
2	Summarize various stakeholder's roles and significance in relations to corporate governance
3	Comprehend the administrative mechanisms involved in corporate governance.
4	Understand the importance of regulation, markets and information in corporate governance
5	Comprehend the corporate governance methods and practices.
6	Summarize governance concerns for individual corporation and their stakeholders
TEXT BOOKS:	
1	Mandal, S.K (2012). Ethics in Business and Corporate Governance, 2/e; New Delhi:McGraw Hill Education.
2	Cadbury, Adrian, Corporate Governance and Chairmanship: a personalview, Oxford University Press, 2003.
REFERENCES:	
1	Chandratre, K R and A N Navare, Corporate Governance – A Practical Handbook, Bharat Law House Pvt. Ltd., 2010 Edn
2	Saleem Sheikh & William Rees, Corporate Governance & CorporateControl, Cavendish Publishing Ltd., 1995
3	Fernando, A.C (2012). Corporate Governance: Principles, Policies and Practices, 2/e; New Delhi: Pearson 6. Jain, Arun K (2010). Corporate Governance: Strategy and Ethics, New Delhi: McGraw Hill Education
WEB REFERENCES:	
4.	https://corpgov.law.harvard.edu/2016/09/08/principles-of-corporate- governance/
5.	https://hbr.org/2015/03/corporate-governance-2-0
6.	https://www.corpgov.net/2015/05/corporate-governance-in-india/

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

21MB3209	EVENT MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- This course is designed to provide an introduction to the principles of event management.
- The course aims to impart knowledge on the various events and how these events can be organized successfully.

UNIT - I	EVENT CONTEXT	9

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

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, Licence 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. Event Communication & Presentation Skills, Written communications, (Official, demi-official, Invoice, tender, proposal). Verbal communications Presentation skills and use of computer in events

UNIT - IV	EVENT OPERATION	9

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

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

OUTCOMES:

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

1	Comprehend to Learn about structure and code of ethics of events
2	Exploring and getting to know about event planning and regulations
3	Develop an understanding of functional sheets and their importance in project planning and execution.
4	Understand about event marketing, planning and strategies
5	Evaluate professional skills in event management
6	Analyze the safety measure of event management
TEXT BOOKS:	
1	Lynn Van Der Wagen, Event Management for Tourism, Cultural Business & Sporting Events, 4 th Edition, Pearson Publications, 2014.
2	Lynn Van Der Wagen, & Brenda R. Carlos,Sucessful Event Management.
3	Judy Allen, Event Planning 2nd Edition, Wiley & Sons, Canada, 2014.
REFERENCES:	
1	John Beech, Sebastian Kaiser & Robert Kaspar, The Business of Events Management, Pearson Publication, 2014.
2	Judy, Event Planning Ethics and Etiquette: A Principled Approach to the Business of Special Event Management, 2014.
3	Shannon Kilkenny, The complete guide to successful event planning.
WEB REFERENCES:	
1	https://onlinecourses.swayam2.ac.in/nou20_ge01/preview
2	https://institute-of-event-management.com/event-management-resources
3	https://ncert.nic.in/textbook/pdf/lehe209.pdf
4	http://www.ignouhelp.in/ignou-devmt-study-material/

	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

21MB3210	MICRO AND SMALL BUSINESS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To familiarize students with the theory and practice of small business management.
- To learn the legal issues faced by small business and how they impact operations.

UNIT - I	INTRODUCTION TO SMALL BUSINESS	9

Creation, Innovation, entrepreneurship and small business - Defining Small Business –Role of Owner – Manager – government policy towards small business sector- Different Stages of Small business – Steps in Setting up a Small Business –elements of entrepreneurship –evolution of entrepreneurship –Types of Entrepreneurship – social, civic, corporate - Business life cycle - barriers and triggers to new venture creation – process to assist start-ups – small business and family business.

UNIT - II	SCREENING THE BUSINESS OPPORTUNITY AND ` FORMULATING THEBUSINESS PLAN	9

Concepts of opportunity recognition; Key factors leading to new venture failure; New venturescreening process; Applying new venture screening process to the early-stage small firm Role planning in small business – importance of strategy formulation – management skills for small business creation and development. Small Enterprises in International Business – Export Documents and Procedures for Small Enterprises – E-commerce and Small Enterprises.

UNIT - III	BUILDING THE RIGHT TEAM AND MARKETING STRATEGY	9

Management and Leadership – employee assessments – Tuckman‟s stages of group development - The entrepreneurial process model - Delegation and team building - Comparison of HR management in small and large firms - Importance of coaching and how to apply a coaching model. Marketing within the small business - success strategies for small business marketing - customer delight and business generating systems, - market research, - assessing market performance- sales management and strategy - the marketing mix and marketing strategy. Role of Women SHGs in Micro Enterprises.

UNIT - IV	FINANCING SMALL BUSINESS	9

Main sources of entrepreneurial capital; Nature of „bootstrap" financing - Difference between cash and profit - Nature of bank financing and equity financing - Funding-equity gap for small firms. Importance of working capital cycle - Calculation of break-even point - Power of gross profit margin- Pricing for profit - Credit policy issues and relating these to cash flow management and profitability.

UNIT - V	VALUING SMALL BUSINESS AND CRISIS MANAGEMENT	9

Causes of small business failure - Danger signals of impending trouble - Characteristics of poorly performing firms - Turnaround strategies Concept of business valuation – Different valuation measurements - Nature of goodwill and how to measure it - Advantages and disadvantages of buying an established small firm - Process of preparing a business for sale.

TOTAL: 45 PERIODS

OUTCOMES:

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

1	Comprehend the students with the concept of small business.
2	Analyze In depth knowledge on small business opportunities and challenges.
3	Summarize proficiency in the procedures and processes involved inexporting goods as a small enterprise.
4	Ability to devise plans for small business by building the right skills and marketing strategies.
5	Analyze and Identify the funding source for small start-ups.
6	Comprehend the principles andmethodologies used in valuing small businesses.

TEXT BOOKS:

1	Hankinson,A.(2000). "The key factors in the profile of small firm owner-managers that influence business performance. The South Coast Small Firms Survey, 1997-2000." Industrial and Commercial Training 32(3):94-98.
2	Parker,R.(2000). "Small is not necessarily beautiful: An evaluation of policy support for small and medium-sized enterprise in Australia." Australian Journal of Political Science 35(2):239-253.

REFERENCES:

1	Barrow C. The Essence of Small Business, Prentice Hall of India, New Delhi, 1997.
2	Poornima M Charanthimath, Entrepreneurship Development Small Business Enterprises, Pearson,3e, 2019.

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

21MB3211	FUZZY LOGIC FOR MANAGEMENT DECISION MAKING	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To study the fundamentals of fuzzy logic to apply in management decision making.

UNIT - I	FUZZY SETS	9

Introduction - Definitions & Terminologies - Formulation and Parameterization of Membership Functions - Fuzzy Union, Intersection and Complement.

UNIT - II	FUZZY RULES AND REASONING	9

Extension Principle and Fuzzy Relations - Linguistic Variables and Fuzzy If-Then rules - Compositional rule of inference and fuzzy reasoning.

UNIT - III	FUZZY APPLICATIONS IN MANAGEMENT DECISIONS	9

Fuzzy Models - Mamdani and Sugeno models. Applications in Management Decision making.

UNIT - IV	ADAPTIVE NEURO FUZZY INFERENCE SYSTEMS	9

ANFIS Architecture - Hybrid Learning Algorithm - ANFIS and RBFN cross fertilization - ANFIS as a Universal Approximator.

UNIT - V	COACTIVE NEURO FUZZY MODELING	9

Framework of Generalized ANFIS - multiple I/O Systems, Architectural comparisons. Neuron functions for Adaptive networks - Neuro-Fuzzy Spectrum - Analysis of Adaptive Learning Capability.

TOTAL: 45 PERIODS

OUTCOMES:

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

1	Comprehend the basics and terminologies of fuzzy.
2	Understand the principles and relations of fuzzy.
3	Evaluate the proficiency in designing and implementing fuzzy rule-based systems
4	Comprehend the applications of fuzzy.
5	Analyze the architecture of adaptive neuro fuzzy inference system.
6	Analyze the neuro-fuzzy systems to management decision making situations.

TEXT BOOKS:

1	Jang J.S.R., Sun C.T. and Mizutani E, Neuro-Fuzzy and Soft Computing - A computational Approach to Learning and Machine Intelligence, Pearson Education, 2007.

REFERENCES:

1	Sundareswaran K, A Learner's guide to Fuzzy Logic Systems, Jaico Publishing House,2005.

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

21MB3212	INTELLECTUAL PROPERTY RIGHTS	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Students will develop a foundational understanding of intellectual property and its significance in various industries and sectors.
- Learners will gain knowledge of the national and international laws and regulations governing intellectual property rights.

UNIT - I	INTRODUCTION	9

Intellectual property rights - Introduction, Basic concepts, Patents, Copyrights, Trademarks, Trade Secrets, Geographic Indicators; Nature of Intellectual Property, Technological Research, Inventions and Innovations, History - the way from WTO to WIPO, TRIPS. The Role and Liabilities of IPRs in India

UNIT - II	PROCESS	9

New Developments in IPR, Procedure for grant of Patents, TM, GIs, Patenting under Patent Cooperation Treaty, Administration of Patent system in India, Patenting in foreign countries. Contemporary Issues in IPR-Interface between IPR and Competition Law, IPR and sustainable development, The Impact of Internet on IPR, IPR Issues in Biotechnology, E-Commerce and IPR issues

UNIT - III	STATUTES	9

International Treaties and conventions on IPRs, The TRIPs Agreement, PCT Agreement, The Patent Act of India, Patent Amendment Act (2005), Design Act, Trademark Act, Geographical Indication Act, Bayh- Dole Act and Issues of Academic Entrepreneurship – Enforcement of Intellectual Property Rights

UNIT - IV	STRATEGIES IN INTELLECTUAL PROPERTY	9

Strategies for investing in R&D, Patent Information and databases, IPR strength in India, Traditional Knowledge - Cyber laws: Criminal law data safety, online privacy, health privacy, freedom of expression and human rights, national Security.

UNIT - V	MODELS	9

The technologies Know-how, concept of ownership, Significance of IP in Value Creation, IP Valuation and IP Valuation Models, Application of Real Option Model in Strategic Decision Making, Transfer and Licensing. Technological and Legal Development in Intellectual Property

TOTAL: 45 PERIODS

OUTCOMES:

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

1	Comprehend the intellectual property and appreciation of the need to protectit.
2	Create the Awareness about the process of patenting
3	Understand of statutes related to IPR
4	Ability to apply strategies to protect intellectual property

5	Ability to apply models for making strategic decisions related to IPR
6	Analyze latest technological advancements andtheir impact on intellectual property.
TEXT BOOKS:	
1	V. Sople Vinod, Managing Intellectual Property by (Prentice hall of India Pvt.Ltd), 2006.
2	Intelluctual Property rights and copyrights ,EssEss Publications.
3	Intellectual Property Rights – Unleashing the knowledge economy, Prabhuddha Ganguli, Tata McGraw Hill Publishing Company Ltd.
4	A. Primer, R. Anita Rao and Bhanoji Rao, Intelluctual Property Rights, Lastain Book company.
REFERENCES:	
1	Edited by Derek Bosworth and Elizabeth Webster, The Management of Intellectual Property, Edward Elgar Publishing Ltd., 2006.
2	WIPO Intellectual Property Hand book.
WEB REFERENCES:	
1	www.wipo.int
2	library.jgu.edu.in
3	eprints.rclis.org
ONLINE COURSES / RESOURCES:	
1	Cyber Laws
2	Corporate Contracts
3	Online certificate course on intellectual property (IPPro)
4	Online Certificate Course on Intellectual Property Rights & Competition Law (IPComp)
5	Online Certificate Course on IP Protection & Commercialization (IPProComm)

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

21MB3213	SUSTAINABLE MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- 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.

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 - CSR-Legislation in India and the World Section 135 of Companies Act 2013.Scope for CSR Activities under Schedule VII, Appointment of Independent Directors on the Board, and Computation of Net Profit's Implementing Process in India.

UNIT - III	SUSTAINABILITY MANAGEMENT: 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	SUSTAINABILITY AND INNOVATION	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. Concepts of Ecology, Sustainability, NRM, CPR, Livelihood, Culture and Sustainable Development Cultural ecology and Ethno-ecology Theoretical and Methodological Approaches in NRM Climate Change, Natural Calamity and Social Adaptation Disaster issues Indigenous Knowledge and Natural Resource Management Depletion of Natural Resources and Livelihood Policy and Natural Resource Management: Water, Forest, Mining and Land Gender and Livelihood and Displacement and Rehabilitation.

TOTAL: 45 PERIODS

OUTCOMES: On successful completion of the course student will be able to:	
1	Comprehend sustainability management as an approach to aid in evaluating and minimizing environmental impacts while achieving theexpected social impact.
2	Analyze the corporate sustainability and responsible Business Practices
3	Knowledge and skills to understand, to measure and interpret sustainability performances.
4	Comprehend green engineeringprinciples and practices.
5	Summarize the Knowledge of innovative practices in sustainable business and community Management
6	Analyze sustainable management of resources andcommodities
TEXT BOOKS:	
1	Daddi, T., Iraldo, F., Testa, Environmental Certification for Organizations and Products: Management, 2015
2	Christian N. Madu, Handbook of Sustainability Management 2012
3	Petra Molthan-Hill, The Business Student's Guide to Sustainable Management: Principles and Practice, 2014
REFERENCES:	
1	Margaret Robertson, Sustainability Principles and Practice, 2014
2	Peter Rogers, An Introduction to Sustainable Development, 2006
WEB REFERENCES:	
1	http://www.ignouhelp.in/ignou-pgdesd-study-material/
2	https://www.cisl.cam.ac.uk/education/learn-online/business-sustainability-management- online-short-course

	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	-	-

21MB3301	STRATEGIC MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Expose the students to the fundamental concepts of strategy and the process of strategic management.
- Update the students with the current trends in the global business environment by enriching their understanding towards changes in industry in order to have a sustained competitive advantage
- Provision of knowledge regarding Selection of various Strategies at the Corporate and Business Level
- Strategic implementation and evaluation with emphasis on Structure and control systems
- Understanding of Strategic issues pertaining to current trends

UNIT - I	STRATEGY AND PROCESS	9

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

UNIT - II	COMPETITIVE ADVANTAGE	9

External Environment – Porter's Five Forces Model – Strategic Groups – Competitive Changes during Industry Evolution - Globalization and Industry Structure – National Context and Competitive advantage – Internal Environment – Resources- Capabilities and Competencies-Low cost and differentiation – Generic Building Blocks of Competitive Advantage- Distinctive Competencies - Durability of Competitive Advantage – Avoiding failures and sustaining Competitive advantage – Case study

UNIT - III	TYPES OF STRATEGIES AND TECHNIQUES	11

Strategy in the Global Environment – Building and Restructuring the Corporation – Corporate Strategies – Diversification and Integration – Business level strategies – Strategic analysis and Choice – Environmental Threat and Opportunity Profile (ETOP) – Organizational Capability Profile (OCP) – Strategic Advantage Profile (SAP) – Corporate Portfolio Analysis – SWOT Analysis – GAP Analysis – Mc Kinsey's 7s Framework – GE 9 Cell Model – Balance Score Card-Case study.

UNIT - IV	STRATEGY IMPLEMENTATION & EVALUATION	9

The implementation process, Resource allocation, Designing Organizational Structure-Designing Strategic Control Systems- Matching Structure and Control to Strategy-Implementing Strategic Change-Politics-Power and Conflict- Techniques of Strategic Evaluation & Control-case study.

UNIT - V	OTHER STRATEGIC ISSUES	7

Managing Technology and Innovation – Strategic issues for Non Profit organisations. New Business Models and strategies for Internet Economy – Strategic Management in the current scenario of a globalized economy.

	TOTAL: 45 PERIODS
OUTCOMES: On successful completion of the course student will be able to:	
1.	Comprehend the Strategic management process in business organizations , its governance and social responsibility
2.	Understand the various strategic issues by analyzing the impact of external and internal environmental factors on business and industry
3.	Apply the impact of current trends in business and the necessity for developing competitive advantage
4.	Evaluate the strategies at business and corporate level through various tools and techniques
5.	Comprehend awareness in monitoring and development of suitable control systems required for organizational strategy implementation
6.	Design insights in application of relevant strategies to develop and manage new business models, Technology and innovation
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
REFERENCES:	
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.

CO-PO mapping

	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

21MB3302	INTERNATIONAL BUSINESS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To expose students to various facets of international business.
- To understand the multinational dimensions in management of a MNC Company and the business operations in more than one country.
- To measure various control mechanisms / approaches in international business
- To inculcate knowledge about international functions across various domain areas
- To understand ethical issues and conflict resolution techniques in international business

UNIT - I	AN OVERVIEW OF INTERNATIONAL BUSINESS	9

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

UNIT - II	THEORIES OF INTERNATIONAL TRADE AND INVESTMENT	9

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

UNIT - III	GLOBAL ENTRY	9

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

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

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

UNIT - V	HUMAN RESOURCE MANAGEMENT IN INTERNATIONAL BUSINESS	9

Selection of expatriate managers - Managing across cultures - Training and development - Compensation - Disadvantages of international business – Conflict in international business - Sources and types of conflict – Conflict resolutions – Negotiation – Ethical issues in international business – Ethical decision making.	
TOTAL: 45 PERIODS	
OUTCOMES: On successful completion of the course student will be able to:	
1.	Describe the theories of trade and investment practices in the competitive global world
2.	Explain In Depth knowledge of dynamic factors of international Business
3.	Applying deep Insights in to various market entry strategies followed by Global Organizations in cutting edge technology.
4.	Analyze the various global productions and supply chain issues and have an understanding of foreign exchange determination system in digital environment.
5.	Estimate with standard practices in international business governance ethically across borders
6.	Creating awareness in monitoring the development of international business ventures and research.
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.
REFERENCES:	
1.	Michael R. Czinkota, Ilkka A. Ronkainen and Michael H. Moffet, International Business,7th Edition, Cengage Learning, New Delhi, 2010.
2.	John D. Daniels and Lee H. Radebaugh, International Business, Pearson Education Asia, New Delhi, 12th edition.
3.	Rakesh Mohan Joshi, International Business, Oxford University Press, New Delhi, 2009.

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

21MB3390	CREATIVITY AND INNOVATION LABORATORY	L	T	P	C
		0	0	4	2

OBJECTIVES: To impart Knowledge on the following topics:

- To understand the nuances involved in Creativity & Innovation.
- To get hands on experience in applying creativity in problem solving.
- To Study a problem from multiple perspectives in creativity.
- To explain the fundamental concept of innovation and design thinking
- To discuss the methods of implementing design thinking in the real world.

UNIT - I	INTRODUCTION	9

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

UNIT - II	MECHANISM OF THINKING AND VISUALIZATION	9

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

UNIT - III	CREATIVITY	9

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

UNIT - IV	CREATIVITY IN PROBLEM SOLVING	9

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

UNIT - V	INNOVATION	9

Innovation- radical vs evolutionary,- Introduction to TRIZ methodology of Inventive Problem Solving – the essential factors – Innovator's solution – creating and sustaining successful growth – Disruptive Innovation model – Segmentive Models – New market disruption - Managing the Strategy Development Process – The Role of Senior Executive in Leading New Growth – Passing the Baton, Entrepreneurial Tools for Creativity and Innovation.	
TOTAL: 45 PERIODS	
OUTCOMES:	
1.	Summarize the insights about approaches to creativity and innovation
2.	Understanding of heuristic models and its applications
3.	Comprehend the cognitive resources to relevant aspects of their environment or mental representations
4.	Enhances the knowledge of nature of creativity
5.	Ability to apply creativity in problem solving
6.	Gain Knowledge about radical and disruptive models of innovation.
TEXT BOOKS:	
1.	Rousing Creativity: Think New Now Floyd Hurt, ISBN 1560525479, Crisp Publications Inc. 1999
2.	Geoffrey Petty," how to be better at Creativity", The Industrial Society 2012
REFERENCES:	
1.	Clayton M. Christensen Michael E. Raynor," The Innovator's Solution", Harvard Business School Press Boston, USA, 2007
2.	Semyon D. Savransky," Engineering of Creativity – TRIZ", CRC Press New York USA," 1st edition 2000
3.	CSG Krishnamacharyalu, Lalitha R Innovation management, Himalaya Publishing House 2013

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

21MB3303	INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- To make investment decision and at providing a comprehensive introduction to the areas of investment analysis and portfolio management.
- To enable a comprehensive and continuing illustration of the application of the techniques of the course with the help of analytical tools.
- To dwell on the investment avenues, and operations of the Indian stock market and the role of various financial institutions in aiding the capital formation.

UNIT - I	INVESTMENT SETTING	9

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

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 – Forecasting Earnings – Applied Valuation Techniques – Graham and Dodds investor ratios.

UNIT - III	TECHNICAL ANALYSIS	9

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

UNIT - IV	PORTFOLIO CONSTRUCTION AND SELECTION	9

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

UNIT - V	PORTFOLIO EVALUATION	9

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

TOTAL: 45 PERIODS

OUTCOMES:

1. Apply the concept of investment and identify the investment alternatives to investors.
2. Summarize nuances of fundamental analyses and technical analyses.
3. Comprehend the value of securities.
4. Analyze diversified portfolios that align with investor objectives and risk tolerance.
5. Apprehend the principles of asset allocation and the benefits of constructing a diversified portfolio
6. Comprehend 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

CO	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

21MB3304	FINANCIAL MARKETS	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To understand the types and functions of the various financial markets in India, its instruments and Regulations.
- To provide comprehensive introduction to the functioning of financial market in the emerging context of deregulation and globalization of markets.
- To explain the concepts of Money, Money Supply and Money Creation in an economy.
- To impart knowledge of Financial Markets, Financial Institutions, Financial Services and Financial Instruments that formulates a financial system.
- To provide introduction to the derivatives market, venture capital and private equity.

UNIT - I	FINANCIAL MARKETS IN INDIA	9

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

UNIT - II	INDIAN CAPITAL MARKET- PRIMARY MARKET	9

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

UNIT - III	SECONDARY MARKET	9

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

UNIT - IV	DEBT MARKET AND FOREX MARKET	9

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

UNIT - V	MUTUAL FUNDS, DERIVATIVES MARKETS AND VENTURE CAPITAL AND PRIVATE EQUITY	9

Mutual funds institutions in India. Types of mutual funds, Basics in portfolio management, Metrics of performance for fund manager - Introduction to Derivatives and the size of derivatives markets -Brief introduction to forwards, Options, Futures And Swaps. Role of VCs and PEs in financial markets - Venture capital and Private equity.	
TOTAL: 45 PERIODS	
OUTCOMES:	
1.	Comprehend the basic concepts of the finance markets in India
2.	Analyze the underlying structure and functions of Indian financial markets
3.	Evaluate the methods of issuing shares and the role of intermediaries inthe primary market
4.	Summarize about the trading mechanism in stock market
5.	Students will develop an understanding of the structure, participants, and factors influencing the forex market
6.	Analyze the instruments, participants and trading in debt market.
TEXT BOOKS:	
1.	Pathak, Bharati V., Indian Financial System: Markets, Institutions and Services, Pearson education (Singapore), New Delhi, Fourth edition, 2014.
REFERENCES:	
1.	Christopher Viney and Peter Phillips, Financial Institutions, Instruments and Markets (2015), 8th Edition published by McGraw Hill.
2.	Saunders, Anthonu and Cornett, Marcia Millon, Financial markets and Institutions: An Introduction to the risk management approach, McGraw Hill, Irwin, New York, 3rd Edition, 2017.
3.	Bhole, L.M, Financial institutions and Markets: Structure, Growth and Innovations, McGraw Hill, New Delhi, Sixth edition, 2017.
4.	Fabozzi, Frank J. and Modigliani, Franco, Capital Markets: Institutions and Markets, Prentice Hall of India, New Delhi, Fourth edition, 2009.

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

21MB3305	BANKING MANAGEMENT AND FINANCIAL SERVICES	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To understand the financial services in the country that banking systems deliver, and to harness this functionality for the benefits of the organization and the managers.
- To provide an understanding of profitability and risk while deciding the liability m ix of banks.
- To identify the various regulations and risk management for vertical and horizontal work flow of business operations.
- To understand the concepts of mergers and diversification towards financial stability of banks.
- To know the latest trends in banking industry.

UNIT - I	INTRODUCTION TO INDIAN BANKING SYSTEM AND PERFORMANCE EVALUATION	9

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

UNIT - II	MANAGING BANK FUNDS/ PRODUCTS & RISK MANAGEMENT	9

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

UNIT - III	DEVELOPMENT IN BANKING TECHNOLOGY	9

Payment system in India – paper based – e payment –electronic banking –plastic money – e-money – forecasting of cash demand at ATM's –The Information Technology Act, 2000 in India – RBI‟s Financial Sector Technology vision document – security threats in e-banking & RBI's Initiative.

UNIT - IV	ASSET BASED FINANCIAL SERVICES	9

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

UNIT - V	INSURANCE AND OTHER FEE BASED FINANCIAL SERVICES	9

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

TOTAL: 45 PERIODS

OUTCOMES:	
1.	Gain knowledge on the banking regulations governing the Indian Banking system.
2.	Identify the impact on current trends in banking industry.
3.	Able to explore and apply the various financial tools for managerial decision making.
4.	Identify right solutions to complex problems through various techniques for managing the banking risk.
5.	Learn the recent banking technologies for effective undertaking of business responsibilities.
6.	Creating awareness in monitoring and development of assets based financial services.
TEXT BOOKS:	
1.	Padmalatha Suresh and Justin Paul, Management of Banking and Financial Services, Pearson, Delhi, 2017.
REFERENCES:	
1.	Meera Sharma, Management of Financial Institutions – with emphasis on Bank and Risk Management, PHI Learning Pvt. Ltd., New Delhi 2010
2.	Peter S. Rose and Sylvia C. and Hudgins, Bank Management and Financial Services, Tata McGraw Hill, New Delhi, 2017

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

21MB3306	FINANCIAL DERIVATIVES	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Understand the nuances involved in derivatives
- Understand the basic operational mechanisms in derivatives
- To predict the price movement in the stock market and to provide commitments to prices for future dates to give protection against adverse movements in future prices.
- To understand the basics of the various instruments operating in the stock market along with their trading mechanism and regulations..
- To develop various pricing models of stock prices, trading, hedging of options and management of derivative exposure.

UNIT - I	INTRODUCTION	9

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

UNIT - II	FUTURES CONTRACT	9

Specifications of Futures Contract - Margin Requirements – Marking to Market – Hedging using Futures – Types of Futures Contracts – Securities, Stock Index Futures, Currencies and Commodities – Delivery Options – Relationship between Future Prices, Forward Prices and Spot Prices.

UNIT - III	OPTIONS	9

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

UNIT - IV	SWAPS	9

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

UNIT - V	DERIVATIVES IN INDIA	9

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

TOTAL: 45 PERIODS

OUTCOMES:

1.	Comprehend the good skills in hedging risks using derivatives

2.	Understand about future contract and options
3.	Analyze in depth about options and swaps
4.	Apply pricing models to calculate the theoreticalvalue of currency and futures options.
5.	Summarize about the evolution of derivative markets
6.	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.

PO / CO	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	-

21MB3307	FINANCIAL MODELLING	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Making students to build financial models by including various fields of study viz Financial Management and Derivatives.
- To provide introduction to using tools like Excel in financial valuation.
- To understand the importance of detailed financial modelling for companies in their investment and financial decisions.
- To develop financial applications to manage portfolio risks.
- To calculate valuation of projects and companies in an effective manner.

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

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

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 modelling (B-S Model) - Optimal Hedge Contract modelling.

TOTAL: 45 PERIODS

OUTCOMES:

1.	Understand the purpose and importance of financial modelling in various business contexts
2.	Apply different methods of valuing bonds, including the present value approach and yield-to-maturity approach.
3.	Analyze the advanced financial modelling techniques used in corporate finance.

4.	Evaluate advanced financial modeling skills specifically tailored for capital budgeting evaluation.
5.	Comprehend t h e portfolio management principles and strategies.
6.	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.

CO \ PO	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	-	-

21MB3308	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 and amalgamations 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 SOURCES OF 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.

CO \ PO	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	-	-

21MB3309	BEHAVIORAL FINANCE	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To identify and understand systematic behavioural factors that influences the investment behaviour.
- To Develop an Understanding of finance and enable the students to evaluate the Firm's decision areas related to finance.
- To help students appreciate the limitations of rational models of investment decision making.
- To introduce students to an alternate framework for understanding price discovery in the markets.
- To help students identify persistent or systematic behavioural factors that influence investment behaviour.

UNIT - I	INTRODUCTION: WHY BEHAVIORAL FINANCE	9

The role of security prices in the economy – EMH – Failing EMH – EMH in supply and demand framework – Equilibrium expected return models – Investment decision under uncertainty – Introduction to neoclassical economics and expected utility theory – Return predictability in stock market - Limitations to arbitrage.

UNIT - II	DECISION AND BEHAVIORAL THEORIES	9

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

UNIT - III	DECISION MAKING BIASES	9

Information screening bias - Heuristics and behavioural biases of investors – Bayesian decision making – cognitive biases – forecasting biases – emotion and neuroscience – group behaviour – investing styles and behavioural finance.

UNIT - IV	ARBITRAGEURS	9

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

UNIT - V	MANAGERIAL DECISIONS	9

Supply of securities and firm investment characteristics (market timing, catering) by rational firms - Associated institutions - Relative horizons and incentives - Biased managers.

TOTAL: 45 PERIODS

OUTCOMES:

1. Comprehend the need of behavioural finance.
2. Apply the various decision and behavioural theories.
3. Analyze heuristic and behavioural biases of investors.

4.	Summarize different investing styles commonly adopted by investors.
5.	Analyze and understand about arbitragers and managerial decision.
6.	Comprehend the price discovery in markets.
TEXT BOOKS:	
1.	Daniel Kahneman, Paul Slovic, and Amos Tversky (eds.). (1982) Judgment under Uncertainty: Heuristics and biases, Oxford; New York: Oxford University Press.
REFERENCES:	
1.	Shleifer, Andrei (2000). Inefficient Markets: An Introduction to Behavioural Finance. Oxford, UK: Oxford University Press.

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

21MB3310	BUSINESS ANALYSIS AND VALUATION	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To understand the financial analysis and valuation techniques of a firm.
- To acquire the analytical skills to assess and value a firm.

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

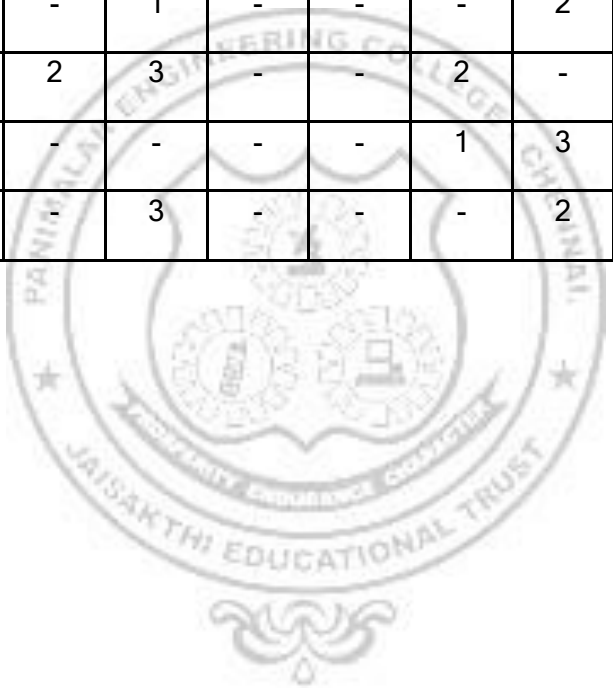
OUTCOMES:

1.	Comprehend the strategy analysis and use it to make proforma statements.
2.	Apply different valuation methods and tools for assessing their accuracy.
3.	Summarize Value creation in a merger and acquisition context.
4.	Analyze the valuation method given the characteristic of a firm and estimate the value of the firm given the chosen method.
5.	Summarize merger integration process, includingthe key stages and activities involved.
6.	Analyse 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).

CO \ PO	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	-



21MB3311	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.

CO \ PO	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	-	-

21MB3312	PROJECT APPRAISAL AND FINANCE	L	T	P	C
		3	0	0	3

OBJECTIVES:

- The course aims to provide students with a comprehensive understanding of project appraisal techniques and methodologies.
- Learn how to interpret and analyze financial statements and use financial ratios to assess project performance.
- Students will gain knowledge of risk assessment and management techniques in the context of project appraisal.

UNIT - I	PROJECT FINANCING	9

Project financing- Concept and Meaning – Unique characteristics – Requirements – Rationale for project financing - Softwares for Project Management

UNIT - II	SOURCE OF PROJECT FINANCING	9

Means of project financing – Sponsors' – lenders and other stakeholder perspective – project financing structures - Project cash flow determination and financing options – Fund vs Non-fund financing – formulating financing mix – Features of debt structure – Debt service covenants.

UNIT - III	PROJECT FEASIBILITY ANALYSIS	9

Project viability and evaluation – Essentials of cost estimation forecasting - Measures used by investors – NPV- IRR- Payback – XIRR- MIRR- Economic IRR- Decision tree analysis – scenario and sensitivity analysis - Evaluating Projects with constraints.

UNIT - IV	RISK ANALYSIS	9

Project Viability – Measures used by lenders- Leverage – Debt Service – Loan Life – Project life cover ratios- preparing the project financing plan- lender's appraisal; Risk Mitigation in projects – Common risks in projects – Risk mitigation methodologies – financial closure risk – securitization as a tool for risk mitigation.

UNIT - V	REAL OPTION VALUATION	9

Real option evaluation of projects – concept and application – Techniques - Simple option valuation – option to expand, contract, abandon – Case studies.

TOTAL: 45 PERIODS

OUTCOMES:

1.	Comprehend the importance of Project financing.
2.	Analyze and Identify appropriate means of project financing.
3.	Evaluate differentiate between fund financing and non-fund financing options.
4.	Evaluate the techniques to determine project feasibility.
5.	Apply the various risk mitigation methods to projectfinancing.
6.	Analyze methods of real option evaluation to project evaluation.

TEXT BOOKS:	
1.	Chandra, Prasanna, “Projects”, 9th Edition, McGraw Hill Education, 2019.
2.	Finnerty, John, “Project Financing: Asset Based Financial Engineering”, 3rd Edition, Wiley and Sons Inc., 2013.
REFERENCES:	
1.	Mun, Jonathan, “Applied Analytical Project Management”, Liper Press, 2020
2.	Srivastava Vikam and Rajaram V, “Project and Infrastructure Finance: Corporate Banking Perspective”, Oxford University Press, 2017.
3.	Stefano, Gatti, “Project Finance in Theory and Practice”, 3rd Edition, Elsevier, 2018.

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

21MB3313	VENTURE CAPITAL AND PRIVATE EQUITY	L	T	P	C
		3	0	0	3

OBJECTIVES:

- The course aims to provide students with a comprehensive understanding of venture capital and private equity as alternative forms of investment.
- Students will gain knowledge of valuation methods specific to venture capital and private equity investments.
- The course may address deal structuring and negotiation techniques in venture capital and private equity transactions.

UNIT - I	INTRODUCTION TO VENTURE CAPITAL AND PRIVATE EQUITY	9

Venture Capital, Angel financers, Private Equity, Hedge funds, their classification and different characteristics. History of Venture capital, Angel financers, Private Equity in India. Different models of VC and Private equity.

UNIT - II	WORKING PROCEDURE	9

The Venture capital cycle, Opportunity recognition, Key parties involved, value of opportunity, negotiation on terms, harvester exit investment. Initial screening, due diligence, risk return fit, Return on investment from cashflows, break-even-point.

UNIT - III	VALUATION OF COMPANIES	9

Understanding the nature of business, Methods of valuation and its role throughout the venture capital process. Valuing companies with options: Real options. Difference in approach and evaluation process of PE, Angel financer, Venture capitalist with Banks and financial institutions.

UNIT - IV	DEAL STRUCTURING AND EXIT	9

Intention, Security type, Liquidation preferences, Shareholder agreement, Share purchase agreement. Going public: Need for going public, IPO process, role of banker, regulation and cost. Selling the venture: Mergers and acquisitions, Buy-back of shares.

UNIT - V	PERFORMANCE AND REGULATORY FRAMEWORK	9

Performance of venture capital: sector wise and year wise. SEBI regulations, Ethics and code of conducts for venture capitalists and private equity.

TOTAL: 45 PERIODS

OUTCOMES:

1.	Distinguish venture capital, private equity, angel capital etc.
2.	Evaluate and short list potential ventures for investment.
3.	Apply various models in valuation of start-ups.
4.	Define real options and their significance in valuing companies with uncertain future outcomes.
5.	Examine alternative deal structuring and exit strategies.
6.	Acquire knowledge on legal regulations for venture capital and private equity firms.

TEXT BOOKS:	
1.	Chandra.P, “Corporate Valuation”, 2nd Edition McGraw Hill, 2020.
2.	Invest, L. “Private Equity: Minority Investments and Buyouts, A Guide to Working with Private Equity”, 2nd Edition, Amazon Digital Services LLC - KDP Print US, 2019.
REFERENCES:	
1.	Kumar.R. and Sharma.M, “Venture Capital Investments”, Sage Publications, 2010.
2.	Ramsinghani.M, “The Business of Venture Capital”, 3rd Edition, Wiley, 2021.
3.	Zeisberger.C, “Mastering Private Equity”, Wiley, 2017.

CO \ PO	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	-	-

21MB3316	STRATEGIC HUMAN RESOURCE MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To help students understand the transformation in the role of HR functions from being a support function to strategic function in the arena of drastically changing business environment and stiff competition as well as to impart an understanding regarding how HR requirements should have a match with organizational goal accomplishment to excel in organizational performance.

UNIT - I	CONTEXT OF SHRM	9

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

UNIT - II	HUMAN RESOURCE DEVELOPMENT	9

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

UNIT - III	E-HRM	9

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

UNIT - IV	CAREER & COMPETENCY DEVELOPMENT	9

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

UNIT - V	EMPLOYEE COACHING & COUNSELING	9

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

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Summarize the concept of SHRM and its strategic role in aligning HR practices with organizational goals and objectives.

2.	Develop a clear vision and mission statement for HRM and HRD that aligns with the overall organizational goals and objectives.
3.	Apply the concept of an electronic employee profile and its importance in managing employee information.
4.	Evaluate the concept of HR portals and their role in providing self-service options to employees.
5.	Apply the importance of career development and its impact on professional success and satisfaction.
6.	Analyze between coaching and counseling and understand their respective purposes and approaches
TEXT BOOKS:	
1.	Jeffrey A Mello, Strategic Human Resource Management, Cengage Learning, 3rd edition, 2011.
2.	Paul Boselie. Strategic Human Resource Management. Tata McGraw Hill, 2011.
REFERENCES:	
1.	Randy L. Desimone, Jon M. Werner – David M. Mathis, Human Resource Development, Cengage Learning, 7th edition, 2016.
2.	Robert L. Mathis and John H. Jackson, Human Resource Management, Cengage Learning, 2007.
3.	Pulak Das. Strategic Human Resource Management- A Resource Driven Perspective- Cengage Learning 4th Indian Reprint- 2013.
4.	Terresa Torres Coronas & Mario Arias Olivia. E-Human Resource Management- Managing Knowledge People- Idea Group Publishing, 2005.
5.	Randall S Schuler and Susan E Jackson. Strategic Human Resource Management. Wiley Publications- 2007.

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

21MB3317	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 relations 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

OUTCOMES:

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

1.	Summarize the concept of industrial relations as the study of relationships and interactions between employers, employees, and their representatives in the workplace.
2.	Apply the key provisions and objectives of the Industrial Disputes Act,1947 in regulating industrial disputes and promoting industrial peace.
3.	Analyze the concept of statutory welfare measures mandated by laborlaws to ensure the well-being of workers.
4.	Apply the concepts of Labour legislation and legal provisions for factory workers,wages and Bonus.

5.	Evaluate provisions for equal remuneration, gratuity, compensation, industrial employment and Apprenticeship.
6.	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.

PO / CO	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

21MB3318	SOCIAL PSYCHOLOGY	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Understanding of key theories, concepts and research methods in social psychology.
- Enhanced understanding of oneself and others in social interactions.
- Ability to analyze and interpret socio psychological phenomena and research findings.

UNIT - I	INTRODUCTION TO SOCIAL PSYCHOLOGY	6

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

UNIT - II	PERCEIVING AND UNDERSTANDING OTHERS	9

Social perception – Nonverbal communication – Attribution – Impression formation and impression management.

UNIT - III	COGNITION IN THE SOCIAL WORLD	10

Self, Self Esteem & Social Comparison, self-efficacy, narcissism, Social cognition - Schemas Heuristics – Errors – Attitudes & Behavior – Persuasion – Cognitive dissonance.

UNIT - IV	INTERPERSONAL RELATIONS	10

Social identity - Prejudice - Discrimination - Aggression - Interpersonal attraction and Relationships.

UNIT - V	APPLIED SOCIAL PSYCHOLOGY	10

Social Influence – Conformity – Compliance – Social Influence – Pro social behaviour - Groups - Social issues, Stress, personal beliefs and health.

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Summarize the fundamentals of social psychology.
2.	Apply social perception and impression management.
3.	Analyze the social cognition and comparison.
4.	Demonstrate a comprehensive understanding of schemas, heuristics, and errors in social judgment, attitudes, persuasion, and cognitive dissonance.
5.	Evaluate social Identity and interpersonal attraction and relations.
6.	Create social influence and the application of social psychology.

TEXT BOOKS:

1.	Baron, Byrne and Brascombe, Social Psychology, 13th Edition, Pearson, 2014.
2.	David G. Myers, Social Psychology, Tata McGraw Hill, 11th Edition,

REFERENCES:

1.	Baron and Byrne, Social Psychology, 8th Edition, PHI, 2006.
2.	Howitt. Social Psychology. Tata McGraw Hill.
3.	Rohall et al. Social Psychology. PHI Learning. 2nd edition.
4.	Attitudes, Personality and Behaviour. Ajzer. Tata McGraw Hill.

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

21MB3319	ORGANIZATIONAL DESIGN, CHANGE AND DEVELOPMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To help the students to gain knowledge about the organization design and concepts of change management and to acquire the skills required to manage any change effectively.
- To understand the concept and techniques of OD and to enhance skills for the application of OD intervention in organizations.
- To comprehend the multifaceted aspects of organizational evolution.

UNIT - I	ORGANIZATIONAL DESIGN	9

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

UNIT - II	ORGANIZATIONAL CHANGE	9

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

UNIT - III	ORGANIZATIONAL DEVELOPMENT	9

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

UNIT - IV	OD INTERVENTION	9

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

UNIT - V	ORGANIZATIONAL EVOLUTION AND SUSTENANCE	9

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

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Comprehend the principles and basic concepts of organization design and structure.
2.	Apply the knowledge of various functions in order to facilitate successful change.
3.	Evaluate the foundational principles, theories and techniques in organization development.

4.	Apply the various components including individual, group, and inter-group human relations techniques, to foster effective relationships and improve organizational dynamics.
5.	Analyze the various methodologies or strategies to improve inter-group development.
6.	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://bersinacademy.com
2.	*https://www.futurelearn.com*
3.	*https://instituteod.com*
4.	*https://www.middleearthhr.com*
5.	*https://www.aihr.com/blog/organizational-life-cycle/*

PO / CO	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

21MB3320	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.

PO / CO	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	-

21MB3321	REWARD AND COMPENSATION MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To impart skills in designing analyzing and restructuring reward management systems, policies and strategies.
- To understand the various dimensions of Compensation Management.

UNIT - I	INTRODUCTION	9

Compensation - Definition - objectives- principles of compensation formulation- Compensation Design and strategy- theories of wage determination- Wage Structure -types of wages- wage boards- wage policy. Compensation decisions - compensation benchmarking - compensation trends and reward system in India.

UNIT - II	EMPLOYEE COMPENSATION AND LABOUR MARKET	9

Macroeconomics of Labour markets- Unemployment and its impact on labour market- Neoclassical microeconomics of labour markets-models, supply and demand-economic model Implications on employee compensation- economic theories and employee compensation- trade - offs - valuation of employee compensation.

UNIT - III	MANAGING EMPLOYEE BENEFITS AND REWARDS	9

Nature and types of employee benefits- statutory employee benefits in India- Deferred compensation plan- Non-monetary benefits. Reward - Meaning, Elements, Types - Basic concepts of reward management - Designing reward system- Approaches to reward system- Difference between reward and compensation.

UNIT - IV	PERFORMANCE RELATED COMPENSATION	9

Performance management system (PMS)-performance objectives - indicators-standards and metric -effective performance modeling-dimensions of performance-competency based pay. Team Compensation – Gain Sharing Incentive Plan – Enterprise Incentive Plan – Profit Sharing Plan- ESOPs.

UNIT - V	EXECUTIVE AND SALES COMPENSATION PLAN	9

Executive Compensation – Components, Theories, Design- Relationship between Fixed and variable pay-Executive Incentive Programmes. Sale Compensation plan- design and administration- sales incentives and motivations. Compensation Management in Multi-National organisations.

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Understand the fundamentals of Compensation Management and Reward Systems, including theories and strategies.
2.	Analyze the economics of the labor market and its impact on employee compensation.
3.	Analyze the trade-offs involved in employee compensation decisions, considering factors such as salary, benefits, incentives, and non-monetary rewards.

4.	Manage employee benefits and rewards effectively.
5.	Implement performance-related compensation systems.
6.	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.

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

21MB3322	INTERNATIONAL HUMAN RESOURCE MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Develop an understanding of the key concepts, theories, and frameworks in international human resource management (IHRM) and its significance in the global business environment.
- Analyze the challenges and opportunities in managing human resources across different countries and cultures, including issues related to global staffing, expatriation, and repatriation.
- Explore the impact of international labor laws, regulations, and cultural factors on HR practices, policies, and strategies in multinational organizations.

UNIT - I	INTRODUCTION TO IHRM	9

Definition – Evolution of HRM- Importance of IHRM, Models of IHRM – Matching Model, Harvard Model, Contextual Model, 5p Model, European Model, IHRM policies, Standardization and Localization of HRM practices.

UNIT - II	IHRM STRATEGIES	10

Internationalization and world business – Strategic orientation, IHRM in cross border Mergers and Acquisitions, International Alliances – IHRM & Competitive advantage- Cultural context of IHRM.

UNIT - III	RECRUITMENT AND SELECTION	6

International Managers staffing - Approaches to staffing - Role of Expatriates - Role of inpatriate - Role of Non expatriates- recruitment and selection methods- Current practices.

UNIT - IV	TRAINING AND DEVELOPMENT, PERFORMANCE APPRAISAL	10

Expatriate training program, components, types, effectiveness measures, HCN training- Trends in international training and development - repatriation process and training. International performance Management methods – cultural issues in Performance Management.

UNIT - V	INTERNATIONAL COMPENSATION	10

Components of international compensation- Approaches to international compensation -Challenges and choices -International Labor Standards - emerging Issues.

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Comprehend the fundamental concepts, models, and practices of International Human Resource Management (IHRM).
2. Analyze the strategic orientation and cultural context that shape IHRM practices in global organizations.

3.	Apply international practices in recruitment and selection processes across different cultural contexts.
4.	Evaluate international perspectives on training and development, considering the unique challenges of managing employees in a global workforce.
5.	Analyze international performance appraisal practices, in evaluating and managing employee performance in a global context.
6.	Implement effective international practices in compensation management to attract, retain, and motivate employees in a globalized business environment.
TEXT BOOKS:	
1.	Peter J Dowling & D E. Welch: International Human Resource Management, Cengage Learning 7th Edition IE., 2017.
2.	P L Rao, International Human resource Management- Text and Cases, Excel Books.
REFERENCES:	
1.	Monir H. Tayeb: International Human Resource Management, A Multinational Company Perspective Oxford University Press, IE.
2.	Ibraiz Tarique, Dennis Briscoe & randall, International Human Resource Management- Policies and practices for Multinational Enterprises, Routledge, 5th edition.
3.	Anne- Wil Har Zing, Ashly Pinnington, International human Resource Management, 3rd edition, Sage Publication
4.	Christopher Brewster, Guy Vernon, Paul Sparrow, Elizabeth Houldsworth – International Human Resource Management, Kogan Page Publishers.

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

21MB3323	HUMAN RESOURCE ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To develop the ability of the learners to define and implement HR metrics those are aligned with the overall business strategy
- To know the different types of Recruitment metrics and understand their respective impact and application in organizations.
- To understand the impact and use of Training & Development metrics and their influence on assessing employee productivity.
- To identify employee engagement and career progression in organizations.
- To understand 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.

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 and Development analysis.

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 employee- PBT per employee - HR cost per employee- HR budget variance - Compensation to HR cost.

TOTAL: 45 PERIODS

OUTCOMES:

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

1. To comprehend the various HR metrics and develop capability to apply at work settings

2.	To evaluate the various HR Key Performance Indicators in evaluating organizational effectiveness
3.	To analyze the various metrics of recruitment analytics to enhance effectiveness in the hiring process.
4.	Apply the relevant metrics for assessing the effectiveness of training and development.
5.	Proficiency in evaluating the effectiveness of employee engagement by usageof analytics and comply with the analytics of career progression
6.	Evaluate the various components of analytics of workforce diversity and development.

TEXT BOOKS:

1.	JacFitzenz , The New HR Analytics, AMACOM , 2010.
2.	Edwards M. R., & Edwards K, Predictive HR Analytics: Mastering the HR Metric. London: Kogan Page.2016.
3.	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: Methods for selection, developing incentives, and improving collaboration. Upper Saddle River, New Jersey: Pearson Education, 2014.
3.	Pease, G., & Beresford, B, Developing Human Capital: Using Analytics to Plan and Optimize Your Learning and Development Investments. Wiley, 2014.
4.	Phillips, J., & Phillips, P.P, Making Human Capital Analytics Work: Measuring the ROI of Human Capital Processes and Outcomes. McGraw-Hill, 2014.
5.	HR Scorecard and Metrices, HBR, 2001.

	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	-	-

21MB3324	TRAINING AND DEVELOPMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Comprehensive understanding of the principles and theories of training and development in the workplace.
- To enable the students to analyze the training needs of individuals and organizations using appropriate tools and techniques.
- Expose the students to understand the training design using relevant methods and modes through virtual and blended learning approaches.
- Enhance skills in delivering training sessions through various assessment metrics for improvement.
- Understanding the objectives of evaluating training programs in an organization for better performance.
- Manifest the students to understand the methods of evaluation of training and development programs.

UNIT - I	INTRODUCTION	9

Training, Development and Performance consulting – Building Learning organizations – Training Policies – organizational climate for training and development – a system model.

UNIT - II	TRAINING NEED ANALYSIS	9

Objectives - Identification of training needs and process – tools and techniques – organizational, task and individual analysis – consolidation.

UNIT - III	DESIGN OF TRAINING AND DEVELOPMENT PROGRAMS	9

Linking training and developmental needs - objectives of various theories - methods – Learning cycles – factors for fixing duration – selection of participants – choice of trainers – course contents – in house arrangements and outsourcing – E-learning – training for trainers.

UNIT - IV	DELIVERING TRAINING AND DEVELOPMENT PROGRAMS	9

Conduction of programs – ice breaking and games – relevance of participants culture – layout facilitating interactions – audio visual aids.

UNIT - V	EVALUATION OF TRAINING AND DEVELOPMENT PROGRAMS	9

Objectives of evaluation – micro and macro levels – methods of evaluation – reaction, learning, behavior and results – Cost benefit analysis – Role of trainer and line manager in evaluations – Design of Evaluation – Kirkpatrick's model.

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Comprehend the concepts and policies of employee development in organizations.
2.	Summarize on training need process and techniques to identify areas for improvement within an organization.
3.	Comprehend the importance of effective training design in achieving learning outcomes.

4.	Summarize delivery of training programs through relevant modes and platforms.
5.	Understand the evaluation of training and development programs for enhancing performance and addressing organizational needs.
6.	Comprehend the impact training evaluation and making necessary adjustments for continuous improvement.
TEXT BOOKS:	
1.	Raymond A Noe and Amitabh DeoKodwani, Employee Training and Development, 7th Edition, Tata McGraw Hill, 2018
2.	Randy L. Desimone, Jon M. Werner – David M. Mathis, Human Resource Development, 6th Edition, Cengage Learning, 2012.
3.	Craig, Robert L., Training and Development Handbook, McGraw Hill
REFERENCES:	
1.	Rolf, P., and Udai Pareek, Training for Development, Sage Publications Pvt. Ltd., 3rd Edition, October 2011
2.	Stimson N, "How to write and prepare training materials", Kogan page, 2nd edition, 2002.
3.	Prior, John, Handbook of Training and Development, Jaico Publishing House, Bombay
4.	Trvelove, Steve, Handbook of Training and Development, Blackwell Business.
5.	Garner, James, Training Interventions in Job Skill Development, Addison-Wesley. Kenney, John; Donelly, Eugene L. and Margaret,Training &Development, London Institute of Personnel Management

CO \ PO	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	-

21MB3325	LEARNING AND DEVELOPMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Develop a comprehensive understanding of the concepts, theories, and principles of learning and development in organizations..
- Design and implement effective learning and development programs that align with organizational goals and support employee growth and skill enhancement.
- Enhance facilitation and instructional skills to effectively deliver learning experiences through various modalities and platforms.

UNIT - I	LEARNING STYLES AND STRATEGIES	9

Learning principles – Learning strategies and styles – Kolb's Learning Styles- Bloom's Taxonomy- Individual differences in the Learning process. Maximizing learning –Recent developments in Instructional and cognitive psychology. Model of employee behaviour–External influences –Internal factors that influence employer behaviour.

UNIT - II	ROLE ANALYSIS AND TRAINING NEED ANALYSIS	9

Role Analysis: Developing the person in the role, RAT (Role Analysis Technique). Role of T & D in organization – Training Process model- Identification of Training Needs: Organizational analysis – Task Analysis – Person analysis – Prioritizing HRD needs – identifying individual's developmental needs.

UNIT - III	DESIGNING TRAINING AND DEVELOPMENT	9

Principles of training design –defining the objectives – make / buy Decision – selecting the trainers – preparing lesson plan, training methods, materials – scheduling.

UNIT - IV	IMPLEMENTING T & D PROGRAMS	9

Training delivery methods, principles involved in selection of various methods – Techniques of training at different levels – Skills of an effective trainer – e learning and use of technology in training.

UNIT - V	EVALUATION AND TRANSFER OF TRAINING	9

Training Evaluation: Purpose – methods and techniques (models of evaluation) - Transfer of training – issues – transfer process – theories – strategies – Organization and work environmental factors that influence transfer of training – Avoiding common evaluation pitfalls.

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Comprehend the principles and appropriate learning styles to explore the ways to maximize learning.
2. Summarise the role analysis and prioritise the Human resource development needs.
3. Interpret the importance of effective training design in achieving desired learning outcomes.

4.	Understand the training delivery methods and techniques of Training & Development programs.
5.	Comprehend the importance and purpose of training evaluation.
6.	Summarise the factors influencing transfer of training.
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 Trainers", Taylor & Francis, 2018.

CO	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	-

21MB3326	PEOPLE ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Understand the importance and benefits of HR metrics in measuring and analysing HR data.
- Understand the significance of diversity and inclusion in recruitment and the metrics used to assess diversity efforts
- Learn how to analyse training data to evaluate the impact of training programs and optimize learning and development initiatives.

UNIT - I	INTRODUCTION TO HR METRICS AND EXCEL CHARTING	9

Evolution and timeline of HR Analytics - Types of Analytics - HR Analytics Applications - Summarizing & Reporting HR Data using Business Intelligence tools (Importing Data, What-if Scenarios, Pivot Tables, Representation through Funnel Chart, Bullet Chart, Pyramid, Thermometer Chart, Dynamic Charts etc.)

UNIT - II	RECRUITMENT AND DIVERSITY ANALYTICS	9

Social Media for Recruitment and Employer Branding, Diversity Index, Offer Reject and Renege (Logistic Regression), Attrition (Random Forest Algorithm), Channel Efficiency, Recruitment Metrics.

UNIT - III	TRAINING AND DEVELOPMENT AND WORKFORCE DEPLOYMENT ANALYTICS	9

Training Outcome Analysis, Training hours and cost metrics, ROI calculation, Employee Profiling, Turnover Index, Natural Language Processing in HR Analytics – Uncovering employee insights.

UNIT - IV	TALENT RETENTION AND CAREER PROGRESSION ANALYTICS	9

Retention Index, Voluntary and involuntary Turnover, Career Path Index, Succession Readiness index, Employee Satisfaction and Engagement Surveys, Gamification for Employee Engagement..

UNIT - V	HR AUDITS AND VISUALIZATION OF HR DATA	9

HR Audit Process, Recruitment and Selection Process Audit, Statutory Compliance Audit, Benchmarking, Design Thinking Principles for Dashboards, KPI Dashboard, KPI Scorecard, HR Balanced Scorecard.

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Represent HR data through appropriate Business Intelligence tools.
2.	Evaluate and derive insights from Recruitment and Diversity metrics.
3.	Explore techniques for analyzing recruitment data to identify areas for improvement and enhance recruitment strategies.
4.	Analyse and obtain insights from Training & Development and Workforce Deployment metrics.

5.	Assess and infer insights from Talent Retention and Career Progression metrics.
6.	Perform HR Audits and present HR data through dashboards.
TEXT BOOKS:	
1.	Acharya, S. “Data Analytics Using R”, McGraw Hill Education, 2018.
2.	Bhattacharyya, D. K., “HR Analytics: Understanding Theories and Applications”, 1st Edition, Sage Publications India Pvt Ltd, 2017.
REFERENCES:	
1.	Edwards, M.,& Edwards, K, “Predictive HR Analytics: Mastering the HR Metric”, 2nd Edition, Kogan Page, 2019.
2.	Lander, J. P, “R for Everyone”, 2nd Edition, Pearson India Education Services, 2018.
3.	Shen Ng, M, “Predictive HR Analytics, Text Mining & Organizational Network Analysis with Excel” Independently Published, 2019.

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

21MB3327	PERFORMANCE MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Develop an understanding of the role of performance management in driving employee engagement, motivation, and productivity.
- Explore techniques for setting SMART (Specific, Measurable, Achievable, Relevant, Time-bound) performance goals.
- Develop strategies for identifying employee development needs, creating development plans, and providing growth opportunities.

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

Performance 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

OUTCOMES:

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

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

2.	Apply the performance management cycle and its key components including goal setting, performance planning, monitoring and feedback.
3.	Analyze skills in creating performance measurement systems that provide meaningful and actionable data.
4.	Evaluate techniques for aligning individual performance goals with organizational objectives.
5.	Apply different methods and techniques for assessing and evaluating performance.
6.	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 Page Publishers, 2009.
REFERENCES:	
1.	Bacal, R, Performance Management", 2 nd Edition, McGraw Hill Professional, 2012.
2.	Herman Aguinis, "Performance Management", 3 rd Edition, Pearson Education India, 2013
3.	Rao, T. V, "Performance Management: Toward Organizational Excellence", SAGE Publications India, 2016.

PO / CO	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		-	-

21MB3328	TALENT ACQUISITION AND MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Learn about the key principles, strategies and trends in talent acquisition.
- Understand different selection methods, such as interviews, assessments and background checks.
- Develop an understanding of ethical considerations and challenges associated with using technology in talent acquisition.

UNIT - I	INTRODUCTION TO TALENT ACQUISITION	9

Introduction to Talent Acquisition, Strategic Alignment and HR Planning, HR Planning , Assessing Staffing Need Analysis, Environmental scanning, HR requirements and availabilities-demand and supply, Preparing Action Plans – Managing Shortage and Surplus Best practices & Trends in Talent Acquisition, Challenges in Talent Acquisition.

UNIT - II	ENGAGING TALENT	9

Process of Talent Acquisition and Sources of Recruitment, Internal & External Recruitment, Contract Staffing and Gig Workforce, Selection Tests- Measurement, Importance and use of measures- Reliability and validity of selection tests, Specific use of Psychometric tests in Talent Acquisition.

UNIT - III	ACQUIRING TALENT	9

Interviewing – Nature and Purpose, Interviewing types and choice of appropriate method based on Needs - Virtual interviews for remote hiring - Interview content- Measurement of attributes and behaviour during Interview, Behavioural Event Interviewing – Assessing the effectiveness of Talent Acquisition.

UNIT - IV	DESIGNING EMPLOYEE ONBOARDING & ENGAGEMENT	9

Introduction to Onboarding, Designing employee Onboarding, Employee Engagement – Benefits, Drivers, Best Practices and Measurement, Employee Retention – Strategies and Approaches for Retaining Talent – Dealing with Voluntary turnover and Job Withdrawals – Role of Coaching and Mentoring in Managing talent. Concerns of Gen X, Y and Z in Talent Management.

UNIT - V	ROLE OF INFORMATION TECHNOLOGY IN TALENT ACQUISTION	9

Introduction, Role of Information Technology in Talent Acquisition, Talent acquisition and hiring solutions, Creating Business Value through Information Technology, Impact of social media, Mobile apps, Cloud and Big data in Talent Acquisition.

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Comprehend the core concepts of HR Planning, Talent Acquisition and Management.
2. Apply the importance of employee branding and its impact onattracting top talent.

3.	Apply the techniques for screening and assessing candidates during the selection process.
4.	Evaluate the skills in making data-driven hiring decisions and extending job offers.
5.	Analyze the strategies for employee engagement in talent retention and organizational success.
6.	Create the role of Information Technology in Talent Acquisition.
TEXT BOOKS:	
1.	Belcourt, M., & McBey, K. J, "Strategic Human Resource Planning", Cengage Learning, 2017.
2.	Bickham, T, "ATD Talent Management Handbook", 1st Edition, ATD Press, 2015.
REFERENCES:	
1.	Gatewood, R. D., Feild, H. S., &Barrick, M. R. "Human Resource Selection", 9th Edition, Wessex Press Inc., 2018.
2.	Heneman, H., & Judge, T, Staffing Organizations, McGraw Hill, 2015. 5. Picardi, C. A. "Recruitment and Selection - Strategies for Workforce Planning & Assessment", Sage Publication, 2019.

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

21MB3331	SUPPLY CHAIN MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Understand the concepts and importance of supply chain management in organizations
- Explore techniques for analyzing and improving the efficiency and effectiveness of supply chain networks
- Develop an understanding of supply chain risk management and strategies for mitigating disruptions and enhancing resilience.

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 supplychain 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

OUTCOMES:

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

1.	**Comprehend** the fundamental concepts of Supply chain and how it improve performance measures.
2.	**Analyze** the pivotal role of distribution network design, strategies within the supply chain

3.	**Analyze** the impact of supply chain redesign on the inventory
4.	**Analyze** the Role, design options, infrastructure and policies related to logistics.
5.	**Analyze** outsourcing, green supply related to logistics.
6.	**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.

PO / CO	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	-

21MB3332	QUALITY MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Explore the evolution of quality management and its role in achieving customer satisfaction and organizational excellence.
- Develop skills in interpreting SPC charts and making data-driven decisions for process improvement
- Develop an understanding of audit processes and continuous improvement within a QMS framework

UNIT - I	INTRODUCTION	9

Introduction - Need for quality - Evolution of quality - Definition of quality. Concept of Quality – different perspectives. Concept of total Quality – Design, inputs, process and output - Attitude and involvement of top management. Customer Focus – customer perception - customer retention. Dimensions of product and service quality. Cost of quality.

UNIT - II	QUALITY MANAGEMENT PHILOSOPHIES AND PRINCIPLES	9

Quality Gurus - Crosby, Deming, Masaaki Imai, Feigenbaum, Ishikawa, Juran, Oakland, Shigeo Shingo, and Taguchi. Concepts of Quality circle, Japanese 5S principles and 8D methodology.

UNIT - III	STATISTICAL PROCESS CONTROL	9

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

UNIT - IV	QUALITY TOOLS AND TECHNIQUES	9

Quality Tools - The seven traditional tools of quality, New management tools. Six-sigma, Bench marking, Poka-yoke, Failure Mode Effect Analysis (FMEA) – FMEA stages, design, process and documentation. Quality Function Deployment (QFD) – Benefits, house of quality. Taguchi - quality loss function, parameter and tolerance design, signal to noise ratio.

UNIT - V	QUALITY MANAGEMENT SYSTEMS	9

Introduction Quality management systems – IS/ISO 9004:2000 – Quality System – Elements, Documentation guidelines for performance improvements. Quality Audits - QS 9000 – ISO 14000 – Concepts. TQM -culture, framework, benefits, awareness and obstacles.

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Comprehend the basics of Quality management

2.	Explore the principles and concepts underlying quality philosophies framed by quality gurus
3.	Summarize the principles and techniques of statistical process control
4.	Apply quality tools to enhance organization's quality performance
5.	Evaluate how to use quality function deployment and FMEA to identify and analyze quality issues.
6.	Comprehend the key components and requirements of QMS implementation.
TEXT BOOKS:	
1.	Dale H. Besterfield, Carol Besterfield-Michna, Glen H. Besterfield, Mary Besterfield - Sacre, Hemant Urdhwareshe, Rashmi Urdhwareshe, Total Quality Management(TQM), Fifth edition, Pearson Education, 2018.
REFERENCES:	
1.	Shridhara Bhat K, Total Quality Management – Text and Cases, Himalaya Publishing House, First Edition 2010
2.	Poornima M. Charantimath, Total Quality Management, Pearson Education, SecondEdition, 2011
3.	Douglas C. Montgomory, Introduction to Statistical Quality Control, Wiley Student Edition 4th Edition, Wiley India Pvt Limited, 2008.
4.	Indian standard – Quality Management Systems – Guidelines for performance improvement (Fifth Revision), Bureau of Indian standards, New Delhi.
5.	Panneerselvam. R, Sivasankaran. P, Quality Management, PHI Learning, 2014

	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

21MB3333	MATERIALS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Learn about the key functions and activities involved in material management
- Develop skills in developing materials plans and managing production schedules.
- Learn about warehouse layout and design principles to optimize space and improve material flow

UNIT - I	INTRODUCTION	9

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

UNIT - II	MATERIALS PLANNING	9

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

UNIT - III	INVENTORY MANAGEMENT	9

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

UNIT - IV	PURCHASING MANAGEMENT	9

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

UNIT - V	WAREHOUSE MANAGEMENT	9

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

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Comprehend the basics of materials management
2.	Evaluate the techniques for optimizing material planning to ensure efficient production and delivery schedules
3.	Apply the techniques for optimizing inventory levels and reducing holding costs

4.	Analyze the purchasing principles, strategies and techniques
5.	Evaluate measuring performance, ensuring productivity and cost effectiveness in warehouse operations.
6.	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	-	-	-	-	-	-

21MB3334	SERVICES OPERATIONS MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Understand 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.

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 – self-service, 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

OUTCOMES:

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

1.	Describe the principles and challenges of Service operations
2.	Apply the Knowledge gained on new service development and technology in service
3.	Apply the current trends in service quality and quality improvement programs

4.	Analyze forthcoming trends related to facility design and layout
5.	Analyze various facility location techniques, vehicle routing and factors influencing the success of retail locations.
6.	Evaluate and intricate problems by formulating strategies for capacity and 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, McGraw-Hill 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, Managing Service Operations, Sage, 2006

COs	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

21MB3335	SUPPLY CHAIN ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Gain knowledge about data-driven supply chains, including the basics of leveraging data and analytics to transform supply chain operations.
- Identifying barriers to implementation, and creating a road map for integrating analytics into supply chain management
- Students will have developed a solid understanding of inventory management, transportation network models, and MCDM models in supply chain management.

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 Transhipment 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	MCDM MODELS	9

Analytic Hierarchy Process (AHP), Data Envelopment Analysis (DEA), Fuzzy Logic and Techniques, Analytical Network process (ANP), TOPSIS-Application in SCM

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Apply descriptive analytics techniques to find out historical data and gain insights into past performance and trends within abusiness context
2.	Understand the principles and concepts of mathematical programming models in the context of optimization problems in facility location decisions

3.	Evaluate space determination and layout methods used in facility design and optimization, including techniques for optimizing space allocation, workflow, and resource utilization
4.	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.
5.	Comprehend vehicle routing problem heuristics, including techniques for optimizing route planning, vehicle allocation, and scheduling
6.	Apply the Master MCDM models (AHP, DEA, Fuzzy Logic, ANP, TOPSIS) and applythem 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	-	-

21MB3336	PROJECT MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Students will learn the principles and techniques involved in project planning, including defining project goals, creating work breakdown structures, and developing project schedules
- Students will gain a comprehensive understanding of budgeting and financial management processes specific to project management, including cost estimation, budget development, and tracking project expenses
- Students will explore various scheduling techniques such as critical path method (CPM) and program evaluation and review technique (PERT), and understand how to allocate resources effectively to optimize project outcomes.
- Students will learn how to monitor and control project progress, assess project performance, and ensure successful project completion within defined scope, time, and budget constraints

UNIT - I	INTRODUCTION TO PROJECT MANAGEMENT	9

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

UNIT - II	PLANNING, BUDGETING AND RISK MANAGEMENT	9

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

UNIT - III	SCHEDULING & RESOURCE ALLOCATION	9

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

UNIT - IV	PROJECT ORGANISATION & CONFLICT MANAGEMENT	9

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

UNIT - V	CONTROL AND COMPLETION	9

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

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Comprehend the skills necessary to effectively fulfill the responsibilities of a Project manager.
2. Apply the ability to communicate project plans, budgets, and risk management strategies to stakeholders throughout the project lifecycle.

3.	Evaluate the process of cost estimating and budgeting in project management, including the techniques and methodologies used to estimate project costs.
4.	Equip with the skills to effectively analyze project schedules, allocate resources, optimize project durations, and manage project constraints.
5.	Analyze and design effective organizational structures, identify and address conflicts, manage project teams, and employ appropriate conflict resolution methods.
6.	Create the understanding of project control processes, performance analysis, project evaluation, reporting, and termination.
TEXT BOOKS:	
1.	Meredith Jack. R, and Mantel Samuel. J, “Project Management: Managerial Approach”, John Wiley, 2012
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/

CO \ PO	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	-	-

21MB3337	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	-

21MB3338	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 Thinkingprinciples and practices into the work culture of organizations.

REFERENCES:

3.	Jimmy Jain, “Design Thinking for Startups: A Handbook for Readers and Workbook for Practitioners”, 1 st Edition, Notion Press, 2018.
4.	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

21MB3339	NEW PRODUCT DEVELOPMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Have a solid understanding of product planning, need identification, and process specification.
- Students will learn about the factors that impact the duration and cost of developing new products, including project scope, complexity, resource allocation, and market dynamics
- Learn techniques for conducting concept testing to gather feedback from target customers and stakeholders

UNIT - I	INTRODUCTION, DEVELOPMENT PROCESS AND OPPORTUNITY IDENTIFICATION	9

New product development - characteristics of a successful product, design job, duration and cost of new product development, challenges of new product development; Product development process and organization – concept development – adapting generic product development process – product development process flows - product development organization; Identifying opportunities – six steps of identification; Management commitment – Review process: Status review, near end review.

UNIT - II	PRODUCT PLANNING, NEED IDENTIFICATION, PROCESS SPECIFICATION	9

Product planning – Identify opportunities – Prioritise and evaluate projects – Resource allocation and timing – complete pre project planning – reflection on results and process; Customer need identification – raw data gathering – interpreting data – organize needs – prioritise needs – results & process audit; Product specifications – what and when – target specifications – final specifications.

UNIT - III	CONCEPT GENERATION, SELECTION AND TESTING	9

Concept generation – problem clarification – external search – internal search – systematic exploration; Concept selection – concept screening, six steps – concept scoring, six steps; Concept testing – seven steps.

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UNIT - IV	PRODUCT ARCHITECTURE AND DESIGN FOR INDUSTRY AND ENVIRONMENT	9

Product architecture – modularity – implications – establishing architecture – platform planning – system level design issues; Industrial design – meaning, need – assessing need, impact – industrial design process – quality assessment Design for environment – Meaning, need, – DFE process.

UNIT - V	DESIGN FOR MANUFACTURING & SUPPLY CHAIN, PROTOTYPING AND ROBUSTNESS	9

Design for manufacturing and supply chain – Meaning, need, requirements – seven steps; Prototyping – meaning, need, principles, technologies, planning; Robust Design – Meaning, need, seven step robustness process; Patents and intellectual property – meaning, need 7 step process.

TOTAL: 45 PERIODS

OUTCOMES: On successful completion of the course student will be able to:	
1.	Comprehend why and where new product development is to take place
2.	Apply the planning process involved in generating productspecifications
3.	Develop an ability to analyze and define process specifications for product development
4.	Apply the concept generation and testing process
5.	Analyze the principles of industrial and environmental design
6.	Analyze the principles of design for manufacturing and supply chain
REFERENCES:	
1.	Crawford, “New Products Management”, McGraw Hill, 11th Edition, 2020
2.	Fradin, “Successful Product Design and Management Toolkit”, Wiley, 2019.
3.	Lawley, Shure, “Product management for dummies”, Wiley, 2017.
4.	Olsen, (2015), “The Lean Product Playbook: How to Innovate with Minimum Viable Products and Rapid Customer Feedback”, Wiley, 1st Edition, 2015.
5.	Ulrich, Eppinger and Yang, “Product Design and Development”, McGraw Hill, 7th Edition, 2020

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	-	2	-	-	-	-	1	-
CO2	-	3	1	-	-	1	2	-
CO3	2	3	-	-	-	-	2	-
CO4	2	2	2	-	-	3	2	-
CO5	-	3	1	-	-	2	3	-
C06	2	3	-	-	-	2	2	-

21MB3340	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

CO \ PO	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	-	-

21MB3346	RETAIL MARKETING	L	T	P	C
		3	0	0	3

OBJECTIVES:

- By the end of the course, students should have a comprehensive understanding of retail management, retail formats, retailing decisions, retail shop management, and retail shopper behavior.
- They should be able to analyze and evaluate retail strategies, make informed decisions related to retail operations, and understand the dynamics of consumer behavior in the retail environment

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

OUTCOMES:

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

1.	Comprehend the conceptual frameworks, theory and techniques to various concepts related to retail management
2.	Apply understanding of various retail formats as well as of theopportunities and challenges that are faced by the retail industry
3.	Apply the decision making process in the areas of store location, brand building, pricing, supply chain management and category management

4.	Apply principles of visual merchandising to create appealing and effective store layouts and displays.
5.	Analyze knowledge of inventory management techniques and their importance in retail operations.
6.	Analyze and interpret consumer behavior and predict shopper motivations and preferences.

C

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 Hill, 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.

CO	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

21MB3347	CONSUMER BEHAVIOUR	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Understand the fundamental theories, concepts, and models of consumer behavior.
- Evaluate the impact of internal and external influences on consumer decision-making.
- Analyze the role of motivation, perception, attitudes, and beliefs in consumer behavior.
- Analyze the influence of opinion leadership and diffusion and adoption on consumer behavior

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

OUTCOMES:

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

1.	Comprehend about consumer behavior theories, concepts and models.
2.	Analyze the impact of consumer orientation of consumer decision-making and behavior
3.	Apply the different internal influences that shape consumer behavior
4.	Analyze the socio, cross-cultural, family group, reference group, communication influences that shape consumer behavior
5.	Evaluate the applicability of traditional consumer behavior models in different contexts, including individual and industrial buying behavior
6.	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

CO	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	-

21MB3348	INTEGRATED MARKETING COMMUNICATION	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Gain a comprehensive understanding of IMC and its importance in modern marketing strategies.
- Explore various marketing communication tools and techniques and understand how to select the most suitable ones for different marketing objectives.
- Examine different digital advertising strategies, such as display ads, video ads, native ads, and mobile ads.

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 budget

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	DIGITAL MEDIA & ADVERTISING	9

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

	TOTAL: 45 PERIODS
OUTCOMES: On successful completion of the course student will be able to:	
1.	Summarise the communication plan of any Company/brand.
2.	Apply Marketing Communication Theories to design IMC program.
3.	Analyse and formulate effective IMC objectives and design a strategic budget.
4.	Apply appropriate media strategy and creative messages and concepts to reach the target audience.
5.	Analyze advancements in digital technology (onlinepromotion) with socially and ethical responsibility in accordance to laws.
6.	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, 2nd Edition

PO / CO	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	-

21MB3349	SERVICES MARKETING	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Students will gain a comprehensive understanding of the unique characteristics and challenges of service marketing.
- Learn about service processes, customer interactions, and service encounter management.
- Develop skills in developing service strategies that align with organizational objectives and customer expectations
- Learn how to evaluate the performance of service marketing efforts using appropriate metrics and measures

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

OUTCOMES:

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

1.	Apply the concepts of services marketing in promoting services.
2.	Justify marketing planning and control systems and howmarketing of services differ from products
3.	Apply nsight on how different service sectors are functioning and marketing of those services along with service measurement and service quality

4.	Analyze how to monitor and improve service quality to enhance customer satisfaction and loyalty.
5.	Evaluate of positioning strategies, service delivery design, pricing methods, and integrated marketing communication in thecontext of service marketing.
6.	Analyze the unique characteristics and challenges ofservice marketing in industries such as health, hospitality, tourism, financial, logistics, educational etc.

TEXT BOOKS:

1.	Christopher 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.

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

21MB3350	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 and channel 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:

1.	Comprehend about the key concepts, principles, and practices involved in managingsales and distribution channels effectively
2.	Apply about the personal selling process and its role in generating sales revenue.
3.	Analyze about sales quotas, their purpose, and the process of setting and evaluating sales targets for individual sales representatives.
4.	Apply recruitment, selection, training, and motivation of salespeople.
5.	Analyze channel design, selection, and management strategies to ensure efficient and effective product distribution.
6.	Apply the fundamentals of logistics and supply chainmanagement.

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.

CO	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

21MB3351	PRODUCT AND BRAND MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To help the students appreciate the relationship between Corporate Strategy and Product and Brand Management
- To provide a framework to understand the new product development process, the organisational structures for new product development and product management functions within an organisation.
- To explore the various issues related to Brand Management and to enhance the understanding and appreciation of this important intangible strategic asset, including brand associations, brand identity, brand architecture, leveraging brand assets, brand portfolio management etc.

UNIT - I	INTRODUCTION	9

Management of New Product Development Process - Managing Product Life cycle – Brands and Branding- Introduction to Brand Management -Brand Management Process – Brand Choice Decisions and Models

UNIT - II	BRAND COMMUNICATION	9

Product Plans-Elements of Branding- Brand Identity -Brand Communication -Brand Positioning -Brand Image and Personality - Valuation of Brands- Brand Valuation – Brand Tracking and Monitoring.

UNIT III	BRAND STRATEGIES	9

Marketing Mix Factors and Products-Managing Brand Over Time- Building Brands in Indian Market - Launching a New Brand -Revitalizing Brands - Branding Strategies- Brand Extension Strategies - Brand Portfolio Management- Managing Brands Across Geographical Borders.

UNIT IV	BRAND STRETCHING	9

Managing Brand Experience - Digital Branding-Employment Branding - Co-branding-Brand extension scorecard-Culture and branding-Brand flashbacks - Future brand priorities.

UNIT - V	PRODUCT PROMOTION AND DISTRIBUTION	9

Advertising -Brand Name Plan- Pricing Systems -Product Distribution Systems – Advertising and Sales Promotion - Product Sales Management -Product and Public Relations Service. Product Marketing -Industrial Product Marketing Product Exports and International Marketing -Critical Success Factors in Brand Management.

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Comprehend the stages and key elements of new product development process, product life cycle and brand management process.
2.	Comprehend the role and importance of brand communication in building and maintaining a strong brand

3.	Apply the key marketing mix factors and their role in developing and managing successful brands.
4.	Comprehend the importance of brand portfolio management and develop strategies for managing multiple brands within a portfolio to optimize brand performance and market coverage
5.	Evaluate the performance of brand stretching initiatives using relevant metrics and key performance indicators
6.	Analyze the different elements of product promotion, includingadvertising, sales promotion, public relations and product marketing exports
TEXT BOOKS:	
1.	Strategic Brand Management: Building, Measuring, and Managing Brand Equity, by Kevin lane Keller; Ambi M. G. Parameswaran; Issac Jacob; Fourth edition; Pearson Education India; 2015; ISBN-10: 9789332542204; ASIN: 9332542201
REFERENCES:	
1.	Product and Brand Management Tapan K. Panda Paperback: 888 pages Publisher: Oxford University Press; First edition (January 2016); ISBN10: 9780199460496; ISBN-13: 978- 0199460496; ASIN: 0199460493
2.	Product and brand management by U C Mathur; Publisher: Excel Books December 2012 ISBN-10: 9350620146;ISBN-13: 978-9350620144

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

21MB3352	DIGITAL MARKETING	L	T	P	C
		3	0	0	3

OBJECTIVES:

- The primary object is to make students to grasp the key concepts in digital marketing and to have an overall understanding of various digital marketing platforms
- It also focusses on how digital marketing can be utilised by organisations and how its effectiveness can measured.

UNIT - I	INTRODUCTION	6

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 -On- Page Techniques - Off-Page Techniques. Search Engine Marketing- How Search Engine works- SEM components- PPC advertising - Display Advertisement

UNIT - III	E-MAIL AND MOBILE MARKETING	12

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

OUTCOMES:

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

1.	Comprehend the functions and metrics of digital marketing and its skills in today‟s rapidly changing business environment
2.	Apply the strategies and skills of search engine optimization and its significance in digital marketing
3.	Apply the concepts of email marketing and various techniques in digital marketing for improve business performance.
4.	Analyze various components and technologies of mobile marketing including mobile advertising, mobile apps and mobile website optimization to enhance brand visibility and customer engagement.
5.	Analyze different social media platforms and their unique features, audience demographics and best practices for marketing purposes.

6.	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

CO	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

21MB3353	MARKETING ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES:

- To make students understand the basics of marketing analytics, its significance, and its application in contemporary business contexts.
- To Acquire skills in forecasting sales, market trends, and consumer behavior using regression analysis, time series modeling, and other predictive techniques.
- To Explore methodologies like cluster analysis and customer lifetime value analysis to segment customers, understand their value, and personalize marketing strategies
- To understand conjoint analysis and demand estimation techniques to optimize product offerings and pricing strategies based on consumer preferences.
- To learn web metrics, SEO analytics, and online advertising analytics to track and optimize digital marketing efforts for enhanced online visibility and engagement.

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

OUTCOMES:

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

1.	Comprehend the extent and utilization of marketing analytics in diverse sectors
2.	Describe data through descriptive, predictive and prescriptive analytics methodologies
3.	Apply customer data, sales data, and market research findings to provide actionable solutions
4.	Analyse various tools for customer segmentation and value analysis

5.	Evaluating the principles and techniques of product and price analytics, retailing analytics and advertising analytics
6.	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. Admiral 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.

CO \ PO	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	0

21MB3354	MARKETING LOGISTICS	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Understand the concept of marketing logistics and its role in overall marketing strategy
- Analyze the components and functions of marketing logistics including transportation, warehousing, packaging and packing
- Understand the importance of efficient supply chain management in supporting marketing activities.

UNIT - I	MARKETING LOGISTICS: AN OVERVIEW	9

Concepts, Objectives and Importance of Marketing Logistics; Marketing-logistics interface, Key tasks and value chain activities; Strategic insights: delivering and managing CRM roles and outcomes. creating competitive and marketing advantage; Domestic & International Logistics-The marketing challenges; Special Aspects of Export and import logistics: Documentation, Processes and insights.

UNIT - II	CREATING AND MANAGING CUSTOMER CENTRIC SUPPLY CHAIN AND LOGISTICS	9

Defining customer service & Developing a Market-driven logistics strategy; Value delivery system, Costs of ownership and Customer Profitability management; Cash to cash cycle, lead-time reduction, Value-added time/non-value-added time, Logistics process re-engineering; Mapping internal and external customer satisfaction - Managing risk in the Supply chain; logistics and performance management,

UNIT - III	CONTAINERIZATION AND TRANSPORTATION	9

Containerization - Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions - Container Freight Station CFS; Export Clearance at ICD; CONCOR; ICDs under CONCOR; Basics of Transportation, Transportation Functionality and Principles; Multimodal Transport; Modal Characteristics, Modal Comparisons; logistical efficiency - International Air Cargo Transport; Coastal and Ocean transportation, Characteristics of shipping transport- Types of Ships- shipping vessels.

UNIT - IV	WAREHOUSING, PACKAGING AND PACKING	9

Warehouse Management - Types Warehousing; Customs Formalities- Clearing, Distribution to Units; Distribution and Omni Channel Network Design; Packing and Packaging -Meaning, Functions and Essentials; Packing for Storage- Overseas Shipment-Inland-Transportation- Product content Protection; Packaging - Types: Primary, Secondary and Tertiary- Requirements of Consumer Packaging; Channel Member Packaging and Transport - Packaging - Shrink packaging.

UNIT - V	LOGISTICS 4.0 AND CHALLENGES OF MARKETING	9

Logistics and Technology – Big data, IoT, AI and Blockchain in Logistics and Supply Chain; Technology embedded freight and transport management; Drone and robotic technologies in logistics- Global Information System GIS and Global Positioning System in logistics; Future scope of E-logistics management, ICT in multi-modal transport and technological trends.
TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Apply the challenges of marketing logistics both domestic and international insights
2.	Apply customer value and services by developing market driven logistics strategy
3.	Analyze comprehensive transportation and containerization strategies
4.	Apply the role and importance of warehousing in marketing logistics
5.	Analyze packaging materials, packing process, designs and sustainability considerations in marketing logistics
6.	Analyze the impact of Logistics 4.0 on marketing strategies, customer experience and supply chain operations

TEXT BOOKS:

1.	Bowersox, Closs, Cooper, "Supply Chain Logistics Management", 5th Edition, McGraw Hill, 2020.
2.	John J. Coyle, C. John Langley, Jr., Robert A. Novack, Brian J. Gibson, "Supply Chain Management: A Logistics Perspective", 10th Edition, Cengage Publication, 2017
3.	Martin Christopher, Helen Peck, "Marketing Logistics", 2nd Edition, Routledge Taylor & Francis Groups, 2018.
4.	Sunil Chopra, Peter Meindl, "Supply Chain Management", 7th Edition, Pearson Education, India, 2018.
5.	Yingli Wang, Stephen Pettit, "E-Logistics: Managing Your Digital Supply Chains for Competitive Advantage", Kogan Page, 2016

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

21MB3355	INBOUND MARKETING	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Understand the concept and principles of inbound marketing and its role in modern marketing strategies
- Explore different channels and platforms for distributing and promoting content effectively
- Analyze and implement inbound marketing strategies and build brand awareness and foster audience engagement.

UNIT - I	INBOUND & CONTENT MARKETING	9

The age of SMAAC and paradigm shifts in Marketing - Inbound Marketing Philosophy- Inbound Vs. Digital Vs. Outbound Marketing - Inbound Marketing Methodology - Inbound Marketing in Practice - CLV - Introduction to Content Marketing - Content Types/Formats - Content Marketing framework - Content Marketing Metrics - Tools for Content Marketing – Effective Blogging

UNIT - II	SEARCH ENGINE OPTIMIZATION	9

Introduction to SEO and SEM - Understanding Google ranking signals or factors and its correlation to search engine rankings - Rank brain and Quality score - Effective SEO techniques for better search results (On page and Off Page optimization) - SEO audit - Tools for conducting SEO audit - Local SEO – Mobile SEO

UNIT - III	SOCIAL MEDIA MARKETING & PROGRAMMATIC AD	9

Introduction to Social Media platforms and its characteristics - Trends - Creating a social media strategy - Measuring social media results - Tools for social media marketing - Basics of Programmatic ads – Native Ads

UNIT - IV	E-MAIL AND MOBILE MARKETING	9

Email Marketing – Types of e-mails - Creating e-mail marketing strategy - Tools for e-mail Marketing - Measuring e-mail marketing campaigns – Basics of Mobile Marketing

UNIT - V	INFLUENCER MARKETING	9

Influencers - Role of Influencers in Marketing today - Strategies for Identifying and engaging Influencers - Tools for Influencer Marketing - Creating an influencer marketing campaign and measuring the results (metrics).

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Comprehend and explain Inbound Marketing & draft content marketing plan
2.	Apply on-page and off page SEO techniques by applying tools and best practices
3.	Apply the concept and importance of conducting SEO audit to assess and improve website performance in search engine rankings

4.	Analyze the principles and strategies of social media marketing and programmatic advertising in inbound marketing landscape.
5.	Apply the key components and best practices for designing effective e-mail and mobile marketing campaigns
6.	Analyze influencer marketing strategies

REFERENCES:

1.	Seema Gupta, “Digital Marketing”, McGraw Hill, 2ndEdition, 2020
2.	Ryan Deiss & Russ Henneberry, “Digital Marketing for Dummies”, Wiley Publication, 2020
3.	Simon Kingsnorth, “Digital Marketing Strategy”, Kogan Page, 2nd Edition, 2019
4.	Brian Halligan & Dharmesh Shah, “Inbound Marketing Revised & Updated”, Wiley Publication, 2014
5.	Jeremy Kagan & Siddharth Shekar Singh, “Digital Marketing Strategy & Tactics”, Wiley, 2020

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

21MB3356	CUSTOMER RELATIONSHIP MANAGEMENT	L	T	P	C
		3	0	0	3

OBJECTIVES:

- Understand the concept and significance of customer relationship management (CRM) in building strong and profitable customer relationships.
- Analyze the role of CRM in enhancing customer satisfaction, increasing customer lifetime value (CLV), and driving business growth.
- Understand the importance of personalized customer interactions and develop strategies for delivering personalized experiences throughout the customer journey

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 – Omnichannel – Team collaboration

TOTAL: 45 PERIODS

OUTCOMES:

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

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

4.	Evaluate the importance and applications of customer analytics in driving data-driven decision making and improving business performance
5.	Analyze the significance of customer satisfaction and loyalty in business success and growth.
6.	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.

CO \ PO	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

21MB3361	DEEP LEARNING AND ARTIFICIAL INTELLIGENCE	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

	Expose the students to solid understanding of the basic concepts and principles of artificial intelligence.
	To enable the students to understand the different approaches to knowledge representation in Artificial Intelligence.
	Provision of knowledge regarding the Application of AI and Basics of Machine Learning.
	Understanding the construction of Deep Feed Forward Networks.
	Understanding the Techniques involved in Regularization of Deep Learning.
	Manifest the students to understand the concept Optimization of Deep Learning Networks

UNIT - I	INTELLIGENT SYSTEMS	9

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

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	ARTIFICIAL INTELLIGENCE APPLICATIONS	9

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

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

OUTCOMES:

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

1.	Apply Heuristic Search Techniques in solving realworld problems.
2.	Summarize knowledge of various AI approaches for knowledge representation.
3.	Comprehend the Knowledge of Expert systems and applications of Machine learning.
4.	Envisage the architecture and principles behind deep forward networks.

5.	Apprehend deep forward network to learn the XOR function, a fundamental problem in artificial intelligence.
6.	Comprehend the unique challenges and considerations involved in optimizing deep models.
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
REFERENCES:	
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.

CO	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	-

21MB3362	SOCIAL MEDIA WEB ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- Learn why social media web analytics are crucial for businesses and organizations to measure their online presence, track their performance, and make data-driven decisions.
- Get hands-on experience with various social media analytics tools and platforms
- Stay abreast of the latest 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

OUTCOMES:

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

1.	Comprehend the significance of social media web analytics for businesses and organizations to measure their online presence.
2.	Summarize community building through collective identity in social media.
3.	Interpret various social media policies.
4.	Apply metrics to Track performance, and make data-driven decisions.
5.	Grasp various web analytics tools.
6.	Summarize search analytics techniques.
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

CO	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	-

21MB3363	BIG DATA ANALYTICS	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- The course aims to provide a solid understanding of the basic concepts, characteristics, and challenges associated with Big Data, including its volume, velocity, variety, and veracity.
- The course aims to provide a solid understanding of the basic concepts, components, and architecture of the Hadoop framework.
- The course emphasizes the importance of effective design principles in visualization.

UNIT - I	INTRODUCTION TO BIG DATA	9

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

UNIT - II	MINING DATA STREAMS	9

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

UNIT - III	HADOOP	9

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

UNIT - IV	FRAMEWORKS	9

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 BigInsights and Streams.

UNIT - V	VISUALIZATION TECHNIQUES	9

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

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Comprehend the computational software and techniques for handling big data in business applications.
2. Apply the concepts, data model and architecture of streams.

3.	Analyze the history and evolution of Hadoop, including its origins, key contributors and significant milestones.
4.	Apply how MapReduce works, including the stages of MapReduce job and the key components involved in its execution.
5.	Apply various application in Big Data.
6.	Comprehend various visualization techniques.
TEXT BOOKS:	
1.	Frank J Ohlhorst, “Big Data Analytics: Turning Big Data into Big Money”, Wiley and SAS Business Series, 2013.
2.	Colleen Mccue, “Data Mining and Predictive Analysis: Intelligence Gathering and Crime Analysis”, Elsevier, Second Edition, 2015.
3.	Paul Zikopoulos, Chris Eaton “Understanding Big Data: Analytics for Enterprise Class Hadoop and Streaming Data”, McGraw Hill, 2012.
REFERENCES:	
1.	Michael Berthold, David J. Hand, “Intelligent Data Analysis”, Springer, Second Edition, 2007.
2.	Bill Franks, “Taming the Big Data Tidal Wave: Finding Opportunities in Huge Data Streams with Advanced Analytics”, Wiley and SAS Business Series, 2012.
3.	Paul Zikopoulos, Dirk de Roos, Krishnan Parasuraman, Thomas Deutsch, James Giles, David Corrigan, “Harness the Power of Big data - The big data platform”, McGraw Hill, McGraw - Hill Osborne Media, 2012.
4.	Pete Warden, “Big Data Glossary”, O‟Reilly, 2011.
5.	Tom White “Hadoop: The Definitive Guide” Third Edition, O’reilly Media, 2012

CO \ PO	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

21MB3364	DATAMINING FOR BUSINESS INTELLIGENCE	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- The course aims to provide a foundational understanding of data mining concepts, techniques, and algorithms.
- The course may include case studies and examples from various industries, demonstrating the application of data mining techniques in real-world business scenarios
- Students are encouraged to think critically and creatively to address complex business intelligence problems using data mining techniques.

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, MAPE, Confusion matrix, Receiver Operating Characteristic curve & AUC; Validation Techniques - hold-out, k-fold cross-validation, LOOCV, random subsampling, 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

OUTCOMES:

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

1.	Comprehend the concepts of data mining in optimizing business process.
2.	Apply the stages and steps involved in data mining process by choosing appropriate method for specific data analysis tasks.
3.	Apply validation techniques in data mining for data visualization
4.	Analyze the various prediction techniques by using appropriate metrics to resolve specific problems.
5.	Analyze various classification and clustering algorithms considering factors like scalability, interpretability and model complexity
6.	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.

PO / CO	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	-

21MB3365	R PROGRAMMING	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- Students will gain a solid understanding of the basic syntax, data types, and control structures in the R programming language.
- Students will gain a solid understanding of non-linear models, including their characteristics, advantages, and limitations.
- Students will learn the fundamentals of time series analysis and its relevance in forecasting and understanding temporal patterns in data.

UNIT - I	GETTING STARTED WITH R	9

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

UNIT - II	FUNCTIONS AND STATEMENTS	9

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

UNIT - III	DATA MANIPULATION AND ANALYSIS	9

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

UNIT - IV	LINEAR MODELS USING R	9

Linear Models - Simple and Multiple regressions, GLM - Logit Regression, Model diagnostics - Residuals, Cross validation, Boot strapping.

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

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

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Comprehend the concept of R packages, which extend thefunctionality of R
2.	Apply how to write their own functions in R, including defining function arguments, specifying return values, and incorporating conditional statements and loops within functions.
3.	Apply various techniques to reshape data using functions and packages in R
4.	Analyze how to perform basic statistical analysis tasks in R, conducting t-tests, andperforming analysis of variance (ANOVA)
5.	Apply linear models using R

6.	Analyze solid understanding of the foundations of nonlinear models, time-series and clustering using R
TEXT BOOKS:	
1.	Jared P. L., R for Everyone - Advanced Analytics and Graphics, Addison Wesley Data and Analytics series, 2015.
2.	Sandip Rakshit, R Programming for Beginners, McGraw Hill Education, 2017

PO / CO	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

21MB3366	PYTHON PROGRAMMING	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- Students will acquire a solid understanding of the core concepts of Python programming, including variables, data types, control flow structures (such as loops and conditionals), functions, and file I/O operations.
- Students will gain hands-on experience in writing Python programs by solving a variety of coding exercises and projects

UNIT - I	INTRODUCTION	9

Introduction to Computer Systems – Computer Hardware – Computer Software – Programming Languages – Algorithmic Problem Solving – Building Blocks of Program – Fundamentals of Python Programming – Syntax and Styles: Data types – Literals – Variable – Operators and Expressions.

UNIT - II	DATA COLLECTIONS AND LANGUAGE COMPONENT	9

Control Flow: If, While, For, Break, Continue, Pass Statements – Entry Controlled Loop –Exit Controlled Loop – Counter Controlled Loop – Condition Controlled Loop – Nested Loops – Sample Programs – Sequences– Lists – Tuples: Need of Tuple - Sequence Unpacking - Methods.

UNIT - III	FUNCTIONS AND MODULES	9

Dictionaries: Making a Dictionary – Basic Operations – Dictionary Operations – Sets –Iterators and Generators – Functions: Introduction – Defining Functions – Calling Functions Passing Arguments – Keyword Arguments – Default Arguments – Required Arguments –Variable –length Arguments – Return Statement – Nesting of Passing Arguments –Anonymous Functions – Recursive Function – Scope of Local and Global Variable – Sample Programs – Modules.

UNIT - IV	OBJECT AND CLASSES	9

Object Oriented Programming Principles: Class Statement – Class Body – Objects – ClassMethods – Self Variable – Class Properties and Instance Properties – Static Method – DataHiding – Deleting an Object – Constructor – Method Overriding – Inheritance – Packages –Strings and Regular Expressions.

UNIT - V	I/O, ERROR HANDLING AND THREADS	9

Files and Directory Access: Files and Streams – Opening a File – Reading/Writing Operations on a File – Other File Operations – Iterating through Files – Splitting Words –Serialization and De-serialization – Hash files – Directory Access – Errors and Exceptions – Multithreading: Introduction to Thread – Differences between Process and Thread –Threading Module – Thread Synchronization.

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Comprehend proficiency in using Python syntax and data types.
2.	Apply the concept of python control flow and its significance in program execution.

3.	Analyze how entry-controlled and exit-controlled loops based on their control conditions.
4.	Apply the concept and importance of dictionaries, sets, iterators, generators, and functions in programming.
5.	Analyze objects from classes and understand the relationship between classes and objects.
6.	Apply the concepts of files, streams, and directory access, thread synchronization in programming.
TEXT BOOKS:	
1.	Ch Satyanarayana, M Radhika Mani, B N Jagadesh, “Python Programming”, Universities Press (India) Private Ltd 2018.
2.	Kenneth A. Lambert, B.L. Juneja, M. Arunachalam, G. Balakrishnan, “Problem Solving and Python Programming”, Cengage Learning India Pvt. Ltd.
3.	Kenneth A. Lambert, ¯ Fundamentals of Python: First Programs, CENGAGE Learning, 2012.
REFERENCES:	
1.	Allen B. Downey, “Think Python: How to Think Like a Computer Scientist”, II edition, Updated for Python 3, Shroff / O‘Reilly Publishers, 2016
2.	Robert Sedgewick, Kevin Wayne, Robert Dondero, ¯Introduction to Programming in Python: An Inter-disciplinary Approach, Pearson India Education Services Pvt. Ltd., 2016.
3.	Timothy A. Budd, ¯ Exploring Python, Mc-Graw Hill Education (India) Private Ltd., 2015.

PO / CO	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

21MB3367	ARTIFICIAL INTELLIGENCE FOR BUSINESS	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- To provide students with a solid foundation in AI concepts, techniques, and methodologies.
- To showcase the various ways AI can be applied to solve business problems and enhance decision-making processes.
- To address the practical challenges associated with implementing AI in a business context.

UNIT - I	INTRODUCTION	9

Introduction to Artificial Intelligence – Artificial Intelligence/Machine Learning/Deep Learning - Application of Deep Learning in Business-Reinforcement Learning.

UNIT - II	COMPONENTS OF ARTIFICIAL INTELLIGENCE	9

Improving Operational Effectiveness and Strategic Innovation using Artificial Intelligence - Introduction to Block Chain - Internet of Things - Quantum Computing

UNIT - III	DEVELOPING ARTIFICIAL INTELLIGENCE MODELS	9

Building an AI Powered Business - Data Driven Decision Making

UNIT - IV	APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN BUSINESS	9

Application of Artificial Intelligence in Marketing, Sales and Customer Service -Data to Scores - Chat Bots - Call Centre Rep Automation - Workflow Automation – Ad Content Prediction

UNIT - V	IMPLEMENTING ARTIFICIAL INTELLIGENCE	9

Concept to Implementation - Implementation of Artificial Intelligence Technology – AI platforms - Data Eco System - Building Expert Teams - Algorithm – Data Feedback System

TOTAL: 45 PERIODS

OUTCOMES:

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

1.	Comprehend and explain the concept of Artificial Intelligence
2.	Apply identify and apply AI techniques to improve operational processes, such as optimization, automation, predictive maintenance, or anomaly detection.
3.	Evaluate the potential applications and benefits of quantum computing in solving complex problems
4.	Analyze the importance of data as a valuable asset for business decision making.
5.	Apply the fundamentals of AI and its applications in marketing, sales, and customer service contexts.

6.	Analyze with the knowledge, skills, and practical understanding necessary to successfully implement AI technology from conceptualization todeployment.
REFERENCES:	
1.	Adelyn Zhou, Marlene Jia, Mariya Yao, “Applied Artificial Intelligence: A Handbook for Business Leaders”, Topbots, 2018.
2.	Ajay Agrawal, Joshua Gans,Avi Goldfarb, LJ Ganser, “Prediction Machines: The Simple Economics of Artificial Intelligence”, Audible Studios, 2018.
3.	Doug Rose, (2018), “Artificial Intelligence for Business: What You Need to Know about Machine Learning and Neural Networks”, Chicago Lakeshore Press, 1st Edition, 2018.
4.	Katie King, “Using Artificial Intelligence in Marketing: How to Harness AI and Maintain the Competitive Edge”, Kogan Page, 1st Edition, 2019.
5.	Prabhat Kumar, “Artificial Intelligence: Reshaping Life and Business”, BPB Publications, 1st Edition, 2019.

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

21MB3368	MACHINE LEARNING FOR BUSINESS	L	T	P	C
		3	0	0	3

OBJECTIVES: To impart Knowledge on the following topics:

- Students should develop a solid understanding of the basic concepts, algorithms, and techniques of machine learning,
- Able to apply various machine learning algorithms, such as linear regression, logistic regression, decision trees, support vector machines, clustering algorithms, and neural networks, to solve business problems and make data-driven predictions.

UNIT - I	INTRODUCTION	9

Introduction to Machine Learning – Artificial Intelligence – Deep Learning - Practical Applications of Machine Learning, Artificial Intelligence, Deep Learning – Dimensionality Reduction Techniques – Factor Analysis

UNIT - II	SUPERVISED MACHINE LEARNING TECHNIQUES	9

Conjoint Analysis – Full/fractional factorial design, choice cards, attribute Importance. Linear Discriminant Analysis - Fisher's method, Mahalanobis method, Standardised coefficients, Unstandardised coefficients, Structured coefficients. Naïve Bayes – Bayes theorem, conditional probability, building naïve bayes classifier

UNIT - III	ADVANCED SUPERVISED MACHINE LEARNING TECHNIQUES	9

Random Forest – Out of bag error rate, variable importance, tuning hyper parameters. SVM – hyper planes and support vectors, SVM model building. Ensemble Methods – bagging, boosting, adaboost, gradient boosting, extreme gradient boosting, bias variance trade-off, Synthetic minority over-sampling technique

UNIT - IV	ARTIFICIAL NEURAL NETWORKS	9

Neural networks – Neural network model building – Perceptron – Bias – Activation Function – Hidden layers – Forward Propagation – Backward Propagation – Introduction to Convolutional Neural Network and Reinforcement Learning

UNIT - V	TIME SERIES ANALYSIS	9

Visualizing time series data - Components of Time Series Data - Stationarity of the Data - Differencing the Time Series – Time Series Models - Simple Exponential Smoothing, Double Exponential Smoothing, Holt's Model, Holt Winters – additive model, multiplicative model - Auto-Regressive Integrated Moving Average Model Building - Residual Analysis - Auto ARIMA Model.

TOTAL: 45 PERIODS

OUTCOMES:

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

1. Comprehend and explain the various concepts of machine learning and artificial intelligence
2. Apply supervised machine learning techniques to build classificationmodels

3.	Apply the idea of hyper planes and support vectors and their role in SVM model building.
4.	Apply different boosting algorithms, such as Ada Boost and Gradient Boosting.
5.	Analyze the concept of artificial neural network and apply it predictive modelling
6.	Apply trend and seasonality components and build predictive models for time series forecasting
REFERENCES:	
1.	Daniel T. Larose and Chantal D, Larose, “Data Mining and Predictive Analytics”, Wiley, 2nd Edition, 2018.
2.	Dean Abbot, “Applied Predictive Analytics- Principles and techniques for the professional data analyst”, Wiley, 2018.
3.	Efraim Turban, Ramesh Sharda, DusunDelen, “Business Intelligence and Analytics- Systems for Decision support”, Pearson, 10th Edition, 2018.
4.	Gordon S.Linoff, MichealJ.A.Berry, “Data Mining Techniques”, Wiley, 3rd Edition, 2017.
5.	MehmedKantardzic, “Data Mining- Concepts, Models, Methods and Algorithms”, Wiley, 2nd Edition, 2018

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