Master of Business Administration

CURRICULUM
[with effect from 2026 – 2028 onwards]

DEPARTMENT OF MANAGEMENT STUDIES
NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI.

VISION OF THE INSTITUTE

- To be a university globally trusted for technical excellence where learning and research integrate to sustain society and industry.

MISSION OF THE INSTITUTE

- To offer undergraduate, postgraduate, doctoral and modular programmes in multi-disciplinary / inter-disciplinary and emerging areas.
- To create a converging learning environment to serve a dynamically evolving society.
- To promote innovation for sustainable solutions by forging global collaborations with academia and industry in cutting-edge research.
- To be an intellectual ecosystem where human capabilities can develop holistically.

VISION OF THE DEPARTMENT

To be a globally acknowledged Business School with social relevance.

MISSION OF THE DEPARTMENT

To develop managers and entrepreneurs of essence and excellence and to enrich the society through education, research and consultancy.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO1	To provide holistic knowledge in business management concepts and techniques with application - oriented learning.
PEO2	To expose students with the latest business development in the Indian and global scenario through industry interaction.
PEO3	To develop management professionals with high ethical standards and commitment to society and to other stakeholders.
PEO4	To foster excellence in management, through innovation and entrepreneurship.
PEO5	To produce business managers and leaders who can adapt to the dynamic business environment.

PROGRAMME OUTCOMES (POs)

PO1	Apply knowledge of management theories and practices to solve business problems.
PO2	Foster Analytical and critical thinking abilities for data-based decision making.
PO3	Ability to develop Value based Leadership ability.
PO4	Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO5	Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment

CURRICULUM

TRIMESTER I

Code	Course of Study	Credit
MB711	Organizational Structure and Design	2
MB712	Legal Aspects of Business	2
MB713	Business Statistics	2
MB714	Financial Reporting and Analysis	2
MB715	Marketing Management - Concepts and Design	2
MB716	Business Communication	2
MB717	Microeconomics	2
MB718	Indian Ethos and Business Ethics	1
	Total	**15**

TRIMESTER II

Code	Course of Study	Credit
MB721	Managing People in Organization	2
MB722	Information Management	2
MB723	Operations Research	2
MB724	Cost and Management Accounting	2
MB725	Marketing Management - Planning and Control	2
MB726	Macro Economics	2
MB727	Business Intelligence Tools	1
MB728	Design Thinking	1
	Total	**14**

TRIMESTER III

Code	Course of Study	Credit
MB731	Human Resource Management	2
MB732	Entrepreneurship Development	2
MB733	Production and Operations Management	2
MB734	Financial Management	2
MB735	Business Research Methods	2
	Elective - 1	2
	Elective - 2	2
	Total	**14**

TRIMESTER IV

Code	Course of Study	Credit
MB741	Strategic Management	2
MB742	Summer Project*	3
	Elective - 3	2
	Elective - 4	2
	Elective - 5	2
	Elective - 6	2
	Elective - 7	2
	Total	**15**

* Students take up summer projects at the end of First year during the vacation for 8 weeks

TRIMESTER V

Code	Course of Study	Credit
MB751	Project Management	2
MB752	Strategic Total Quality Management	2
	Elective - 8	2
	Elective - 9	2
	Elective - 10	2
	Elective - 11	2
	Total	**12**

TRIMESTER VI

Code	Course of Study	Credit
MB761	AI for Business Systems	2
	Elective - 12	2
	Elective - 13	2
	Elective - 14	2
	Elective - 15	2
	Total	**10**

Total minimum credits required for completing the Two years full time regular MBA course is **80 Credits**.

PROGRAMME ELECTIVES (PE)

Sl. No.	Code	Course of Study	Credit
Human Resource Management			
1	MB811	Talent Management	2
2	MB812	Training and Development	2
3	MB813	Interpersonal Effectiveness	2
4	MB814	Compensation and Benefits	2
5	MB815	Counselling in the workplace	2
6	MB816	Change Management	2
7	MB817	Strategic Human Resource Development	2
8	MB818	Negotiation and Conflict Management	2
9	MB819	Industrial Psychology	2
10	MB820	HR Analytics	2
11	MB821	Industrial Relations and Labor Laws	2
12	MB822	International Human Resource Management	2
13	MB823	Knowledge Management and Innovation	2
14	MB824	Managing HR in the Digital Age	2
Marketing Management			
1	MB831	Strategic Brand Management	2
2	MB832	Retail Management	2
3	MB833	Consumer Behaviour	2
4	MB834	Services Marketing	2
5	MB835	Customer Relationship Management	2
6	MB836	Marketing Research	2
7	MB837	Advertising Management	2
8	MB838	Sales Management	2
9	MB839	Strategic Marketing	2
10	MB840	Marketing Metrics	2
11	MB841	Analytics for Strategic market planning	2
12	MB842	Analytics for Strategic market Implementation	2
13	MB843	Business Market Management	2
14	MB844	International Marketing	2
15	MB845	Digital Marketing	2

16	MB846	Neuro Marketing	2
Financial Management			
1	MB851	Financial Institution and Services	2
2	MB852	Investment Security Analysis and Portfolio Management	2
3	MB853	Financial Derivatives	2
4	MB854	Investment Banking	2
5	MB855	Asset Based Financing	2
6	MB856	Behavioral Finance	2
7	MB857	Personal Finance	2
8	MB858	Advanced Corporate Finance	2
9	MB859	Insurance and Pension Schemes	2
10	MB860	Strategic cost Accounting and Management control	2
11	MB861	Tax Laws and Tax Planning	2
12	MB862	Treasury Management	2
13	MB863	International Finance	2
14	MB864	Corporate Valuation	2
15	MB865	Financial Risk Analytics	2
16	MB866	Introduction to FinTech	2
Operations Management			
1	MB871	Production Planning and Control	2
2	MB872	Logistics Management	2
3	MB873	Supply Chain Management	2
4	MB874	Services Operation Management	2
5	MB875	Advanced Materials Management	2
6	MB876	Advanced Operation Research	2
7	MB877	Technology Forecasting	2
8	MB878	Manufacturing Strategy	2
9	MB879	Supply Chain Analytics	2
10	MB880	Lean Manufacturing	2
11	MB881	Game Theory and Applications	2
12	MB882	Behavioral Operations Management	2
Business Analysis and IT Consulting			
1	MB891	Introduction to Business Analysis and IT Consulting	2
2	MB892	Business Analysis and ITC in Marketing and Retail	2

3	MB893	Business Analysis and ITC in Banking and Financial Services	2
4	MB894	Business Analysis and ITC in Manufacturing	2
5	MB895	Systems Analysis and Design	2
6	MB896	Software Project Management	2
7	MB897	Software Quality Management	2
Business Analytics			
1	MB911	Introduction to Business Analytics	2
2	MB912	Basic Data Analytics	2
3	MB913	Big Data Analytics and Data Science	2
4	MB914	Advanced Data Analytics	2
5	MB915	Machine Learning Techniques	2
6	MB916	Advanced Machine Learning Techniques	2
7	MB917	Data Mining Techniques	2
8	MB918	Google Analytics	2
9	MB919	Text Analytics	2
10	MB920	Digital Analytics	2
11	MB921	Data Analytics Software Lab	2
12	MB922	Applied Bayesian for Analytics	2
13	MB923	Operations Analytics	2
General Management			
1	MB931	Innovation and R&D Management	2
2	MB932	Technology Management	2
3	MB933	Course of Independent Study	2
4	MB934	Intellectual Property rights Management	2
5	MB935	Information and Internet Economics	2
6	MB936	International Business and Strategy	2
7	MB937	Political Behavior in Organizations	2

COURSE OUTCOME AND PROGRAMME OUTCOME MAPPING - PROGRAMME CORE (PC)

Course Code	Course Title	CO	Course outcomes At the end of the course student will be able	PO 1	PO 2	PO 3	PO 4	PO 5
MB711	Organizational Structure and Design	CO1	To understand the key concepts of organizations and organization theory and their relevance in modern management practices.	3	3	3	2	2
		CO2	To evaluate the key elements of open system design, including the environmental domains, inter - organizational relationships, and organizational technology	1		2	2	3
		CO3	To assess organizational transformation, including life cycle stages, models of organizational growth and decline, and strategies for organizational control.	2	2	1	2	3
		CO4	To apply knowledge of the dynamic processes involved in managing organizations, including the role of culture, innovation, and technology, to contemporary organization design.	2	2	2	3	3
MB712	Legal Aspects of Business	CO1	To understand key business laws, including the Indian Contract Act, Sale of Goods Act, Companies Act, Consumer Protection Act, FEMA, Information Technology Act, and RTI Act.	3	3	2	3	2
		CO2	To develop skills to analyze legal issues and solve problems using business laws.	3	2		3	
		CO3	To apply business laws in real-world situations, including handling contracts and ensuring regulatory compliance.	3	2		2	
		CO4	To interpret important business laws and assess their implications on operations, ensuring they can provide advice on legal compliance and ethical business practices.	2	2		3	
MB713	Business Statistics	CO1	To understand the characteristics of data and selection of right statistical techniques for analysis	1	2		2	
		CO2	To apply statistical tools to analyze data, draw conclusions, and make predictions about the future	3	2		3	1
		CO3	To better understand business problems and develop problem solving skills	3	3		3	
		CO4	To develop decision making skills from interpretation of analysis results	2	3		1	3

		CO1	To demonstrate and apply fundamental financial accounting concepts and principles to various accounting scenarios.	3			2	1
		CO2	To accurately perform double-entry bookkeeping, and properly account for inventory and depreciation in financial records	1	3		3	
		CO3	To critically evaluate and interpret corporate financial statements, identifying and analyzing key financial metrics	2	2		3	1
MB714	Financial Reporting and Analysis	CO4	To utilize their financial accounting knowledge to analyze financial data, interpret financial statements, and make informed business decisions	2	3		3	3
		CO1	To scan the marketing environment.	2	2	3	3	2
		CO2	To capture the insights of the consumers.	1	2	3	2	3
	Marketing Management -	CO3	To design marketing strategies.	1	3	2	1	2
MB715	Concepts and Design	CO4	To design and develop the new product strategies.	1	2	3	1	3
		CO1	To understand the process and concepts of Business Communication	2	2	3	1	3
		CO2	To comprehend the importance of effective listening and develop persuasive techniques for writing and speaking skills.	2	1	3	1	3
		CO3	To communicate information in a simple, clear, concise and percise form for the smooth functioning of the organization.	2	1	3	1	3
		CO4	To manage change through effective interpersonal communication.	2	2	3	1	3
MB716	Business Communication	CO5	To apply skills by using technology and communicate effectively in different business situations	2	2	3	1	3
		CO1	To understand the concepts of Microeconomics.	3	2		2	
		CO2	To describe and apply demand - supply concepts and its elasticities in the contexts of corporate and government levels.		3		3	
		CO3	To explain the relationship between Production, Cost, Volume and Profit functions and its applications.	2	3		3	
MB717	Microeconomics	CO4	To relate the various types of competitions in the market structure in the real world.	2	3		3	
MB718	Indian Ethos and Business Ethics	CO1	To understand the theoretical underpinnings of Indian ethos, professional and business ethics	3			1	3

		CO2	To describe and demonstrate the significance of community and ethical behavior in business			2		
		CO3	To validate their understanding of business and economic concepts from an ethical stance			2	2	
		CO4	To evaluate and critically assess their managerial values, as well as the significance of ethical dimensions in industry and workplace decision-making			2	2	2
MB721	Managing People in Organization	CO1	To understand the individual differences and gain the ability to manage people at workplace	2		3	1	2
		CO2	To evaluate employee perspectives and its implications on the individual and organizational outcomes	2	1	3	1	3
		CO3	To assess the significance of group behavior in determining the organizational performance	2		2	1	3
		CO4	To apply appropriate concepts and theories to manage people in an organization	3	2	3	1	2
MB722	Information Management	CO1	To understand the different forms of Information systems in business perspective	3			1	
		CO2	To understand IT infrastructure and its applications				3	
		CO3	To know system development methodologies and tools	2	3		2	2
		CO4	To understand business in systems perspectives	1	1		2	2
MB723	Operations Research	CO1	To understand how to use quantitative methods and techniques for effective decision-making.	2	3			1
		CO2	To use Linear programming and solution procedure using graphical method, simplex algorithm, and MS Excel	2	3		1	
		CO3	To comprehend about the transportation model, assignment model and its application	2	3			
		CO4	To understand the basics of Queuing theory and non-linear programming	1	3		2	
MB724	Cost and Management Accounting	CO1	To explain the advanced approaches of Cost Accounting	3	2		2	
		CO2	To prepare a cost sheet and compare alternatives using costing methods.	2	3		1	
		CO3	To develop proper financial control with the use of costing techniques and budgetary control systems	2	3		2	
MB725	Marketing	CO1	To identify the 4Ps.	2			2	

	Management - Planning and Control	CO2	To take managerial decisions on designing - implementing and monitoring the marketing mix elements of marketing functions.	2	3			2
		CO3	To evaluate the marketing control techniques and modern trends in marketing.	2	1	3	2	2
MB726	Macro Economics	CO1	To explain the concepts of Macroeconomics and its interrelations with Microeconomics.	2	3		2	
		CO2	To associate the current economic phenomenon with existing theory and put their views on contemporary economic issues.	3	2		2	
		CO3	To apply the principle of Macroeconomics in explaining the behaviour of Macroeconomic variables at corporate, sectoral, national as well as global levels.	3	2		3	
		CO4	To extend the concepts of Macroeconomics in unfolding the dynamics of various business sectors.	1	2		3	
		CO5	Relate the significance of economic development and sustainability.				3	1
MB727	Business Intelligence Tools	CO1	To use excel for data processing and analysis	2	2			
		CO2	To use R for statistical explorations	2	2			
		CO3	To build skills in Python programming	2	2			
		CO4	To develop dashboards for business applications	2	2		3	3
MB728	Design Thinking	CO1	To develop a strong understanding of the Design Process and how it can be applied in a variety of business settings	2				1
		CO2	To create physical prototypes / a visual representation of an idea	2				
		CO3	To conceive and articulate the Design Thinking approach				2	2
		CO4	To apply design thinking concepts to their daily work and develop solutions based on Design Thinking	3				3
MB731	Human Resource Management	CO1	To understand the significance of human resource management functions at the workplace	3	1	2	2	2
		CO2	To apply HR policies and practices to attain organizations goals	3	2	2	3	2
		CO3	To implement HR policies and practices to enhance employee performance and well-being	3	1	3	2	3
		CO4	To evaluate the emerging business needs and align it with the organizational HR policies and practices	3	1	3	3	2

		CO1	To identify the essential qualities of entrepreneurship and formulate entrepreneurship development process	2		2		3
		CO2	To describe the processes and procedures involved in setting up a venture			2	2	
		CO3	To analyze the scope and future of their business and develop a business idea	3			2	
MB732	Entrepreneurship Development	CO4	To develop an entrepreneurial mindset by nurturing their design skills, growth mindset and resiliency	2		2		3
		CO1	To get an understanding of the "Operations" domain in management	3			2	
		CO2	To gain the skill to apply basic quantitative models for problems in business planning and operations		2			
		CO3	To analyse data and interpret the meaning of data		2			1
MB733	Production and Operations Management	CO4	To prepare basic production reports	3	1			1
		CO1	To understand the basic concepts and principles of financial management.	2			1	
		CO2	To analyse financial statements and use break - even analysis to make managerial decisions.	1	3			2
		CO3	To evaluate capital budgeting decisions and cost of capital concepts.	3	3			1
		CO4	To design and analyse capital structure and understand capital structure theories, dividend theories	2	3		3	3
MB734	Financial Management	CO5	To Plan, finance, and manage working capital, including inventory, cash, and receivables management.	3	2		1	3
		CO1	To understand research methods, tools and techniques.	2				
		CO2	To undertake a systematic outlook towards business situations for the purpose of objective decision - making and scientific inquiry to solve organizational problems.	2	2			
		CO3	To analyse data and interpret the meaning of data.				3	
MB735	Business Research Methods	CO4	To prepare research reports.				2	
		CO1	To demonstrate an understanding of the concepts, process and frameworks of strategic management.	3			2	
MB741	Strategic Management	CO2	To perform internal and external	2	3	3	2	1

			environment analysis for business cases					
		CO3	To apply the strategic analysis techniques for examining the business scenarios, choose and implement appropriate strategic alternatives	2	3	2	2	1
		CO4	To equip with familiarity on strategic evaluation and control techniques	3	2		2	2
MB742	Summer Project	CO1	To orient with specific industry and acquire management knowledge	1		3	1	
		CO2	To identify, analyse and interpret real-time business problems	3	3	1	3	2
		CO3	To gain hands-on experience working with real time projects and contributing to industry	2	2		2	2
MB751	Project Management	CO1	To apply selection criteria and select an appropriate project from different options.	3	3		1	
		CO2	To write a work breakdown structure for a project and develop a schedule based on it.	3	3		2	
		CO3	To use learned techniques to determine & predict the status of the project.	3	3		1	
MB752	Strategic Total Quality Management	CO1	To understand of the crucial role of quality in business.	3			1	
		CO2	To able to recall the evolution of quality management and quality philosophies and practices.	3	2			
		CO3	To explain the need for strategic total quality management in the present business climate.	2	1			
		CO4	To understand the fundamental principles of Lean Manufacturing	2	3			
		CO5	To have exposure on Quality culture followed in world-class companies.				3	
MB761	AI for Business Systems	CO1	Evaluate organizational readiness for AI adoption.	2	3			1
		CO2	Apply prompt engineering techniques to improve AI-assisted decision making.		2		2	
		CO3	Analyze AI applications across Finance, Marketing, HR, I	2	3		1	
		CO4	Design AI implementation roadmaps for business transformation	2	3	1		1

COURSE OUTCOME AND PROGRAMME OUTCOME MAPPING - PROGRAMME ELECTIVES (PE)

Course Code	Course Title	CO	Course outcomes	PO 1	PO 2	PO 3	PO 4	PO 5
Human Resource Management								
MB811	Talent Management	CO1	To explain the different processes involved in the Talent Management					2
		CO2	To explain the strategies and practices involved in managing Talent	3		2		2
		CO3	To understand and appreciate the interplay between different domains of Talent Management and their impact on the performance of the organization					2
		CO4	To design and develop effective Talent Management practices that reflects the strategic goals of the organization	2		3		1
MB812	Training and Development	CO1	To develop knowledge about recent approaches to training and development in the organizations.	2	2		1	2
		CO2	To critically analyze the training needs of an organization.	3	3		1	2
		CO3	To design, develop, and execute comprehensive training programs using various methods and instructional strategies to meet organizational objectives.	3	3	2		3
		CO4	To evaluate the value and effectiveness of training programs using appropriate assessment techniques and methodologies.	2	2			2
MB813	Interpersonal Effectiveness	CO1	To demonstrate self-awareness and apply self - development techniques to resolve self- and interpersonal challenges	2		2		3
		CO2	To demonstrate effective interpersonal/workplace relationship.			2		3
		CO3	To comprehend the necessities of fair and just approach in decision making	2	1	3		
		CO4	To understand the significance of well -being for personal growth	1		1		3
MB814	Compensation and Benefits	CO1	To analyse, integrate and apply the knowledge to solve compensation - related problems in an organization.	1	2	2	2	2
		CO2	To recognize how pay decisions help the organization achieve a competitive advantage.	2	2	3	2	
		CO3	To evaluate how organizations are approaching the vital tasks of managing rewards and developing the capabilities of their people.	1	2	3	2	2
		CO4	To understand the legal issues on employee compensation and settlements of employees and to know the some similarities and	2	2	2		3

			differences between financial and non - financial benefits for the employees.					
MB815	Counselling in the workplace	CO1	To understand the benefits and challenges of workplace counselling and its impact on employee well - being.					2
		CO2	To identify different counselling models and their relevance to the workplace and evaluate their effectiveness.	1		3	2	2
		CO3	To demonstrate effective counselling skills - including assessment - contracting - and termination of counselling sessions			3	1	2
MB816	Change Management	CO1	To develop an understanding of the importance of HR strategies in implementing change and managing HR policies and practices.	2		3	2	1
		CO2	To Understand the process of sustaining change and how to embed a change initiative as the new business as usual.	1	2	3	2	1
		CO3	To explain how organization can change business process to deal with business challenges.	3	3	3	2	2
		CO4	To demonstrate an understanding of how organizations can be made more effective and dynamic by improving the Business Process and structure	1		3	2	2
MB817	Strategic Human Resource Development	CO1	To demonstrate a clear understanding of the evolution and significance of SHRD and its role in enhancing organizational performance.			2	1	
		CO2	To analyse the strategic responses of organizations and develop SHRD strategies that align with organizational objectives.			2	3	
		CO3	To design, implement and evaluate SHRD practices that facilitate the development and growth of employees while contributing to organizational success			2		
MB818	Negotiation and Conflict Management	CO1	To comprehend the vitality of negotiation skills and approaches for conflict management.	3		2		
		CO2	To understand the significance of individual differences, cross - cultural differences in negotiation and conflict handling.	1		2	2	3
		CO3	To evaluate various negotiation strategies and techniques and apply the strategies techniques to resolve the conflict of interests.	3		3	2	2
MB819	Industrial Psychology	CO1	To develop an understanding of the principles and practices of psychology and their application in	2				

			the workplace and everyday life					
		CO2	To evaluate the development of human resources - including recruitment practices - job analysis - and psychological testing			1	1	3
		CO3	To analyse the role of leadership - motivation - job satisfaction - and organizational culture in organizational psychology.			3	1	3
		CO4	To assess the impact of physical working conditions - work schedules - safety and health - and stress management on the workforce.			2		2
		CO1	To demonstrate knowledge on various human resource analytics frameworks and apply the frameworks for real - world business scenarios.	3	2			
		CO2	To understand the alignment between human resource process and organization process and emphasize the significance the alignment analytics	2	3		1	1
		CO3	To apply the knowledge on various human resource metrics and design/implement human resource scorecard for measuring performance		3	2	2	1
MB820	HR Analytics	CO4	To equip with hands - on knowledge on application of analytical approaches for examining the contributions of HR function for organization change.	2	3	2	1	
		CO1	To resolve industrial relations and human relations problems and promote the welfare of industrial labour.	2	2		2	2
		CO2	To analyze the impact of globalization on industrial relations and its effects on employment practices and labour laws.	3	2	2	2	1
		CO3	To explain the key features of labour legislation in India, and industrial relations legislation, and its implications.	3	3	3	2	2
MB821	Industrial Relations and Labor Laws	CO4	To evaluate the significance of social security legislation, various benefits acts, and their impact on employees and employers	2		3	2	1
		CO1	To understand the differences between domestic and international HRM and apply this knowledge in the development of effective IHRM strategies.	3			2	
MB822	International Human Resource Management	CO2	To design and implement human resource management practices for global context.				3	

		CO3	To critically evaluate and apply the knowledge on international industrial relations.	2			3	2
MB823	Knowledge Management and Innovation	CO1	To understand the drivers of knowledge management and the different levels of innovation.	2				
		CO2	To identify the strategic alignment between knowledge management and innovation and develop an implementation plan for a knowledge management program.	2	1			
		CO3	To analyse the business environment, design a KM team, and develop a KM system blueprint for capturing, storing, and sharing knowledge	2	1		2	
MB824	Managing HR in the Digital Age	CO1	To understand the impact of digital transformation on HR practices and functions and identify emerging technologies to enhance HR processes	2	2		1	2
		CO2	To assess and manage the consequences of digital HR effectively and develop strategies for navigating digital HR challenges	3	3		1	2
		CO3	To lead organizational change and foster a culture of continuous learning and adaptability within the organization	2	1	3		2
		CO4	To implement strategies at both individual and organizational levels to manage psychological, physical, and social well-being throughout the digital transformation	2	2			2
Marketing Management								
MB831	Strategic Brand Management	CO1	To choose and design the brand elements for the new product and services.	1	3	2	2	1
		CO2	To differentiate and position the brand in the consumer mind.	1	2	3	3	2
		CO3	To apply the brand equity models.	2	3	2	3	2
		CO4	To craft the integrated marketing communication.	1	3	3	2	2
MB832	Retail Management	CO1	To develop retail strategies considering the real - life retail environment.	3	2			
		CO2	To evaluate the service problems and provide prepare insights to solve the issues.	1	2			
		CO3	To create retail and supply chain strategies.	1	2		2	3
MB833	Consumer Behaviour	CO1	To apply concepts of consumer behaviour in marketing, branding and advertising decisions.	1	3	2	3	1
		CO2	To analyse the intricacies of consumer buying behaviour and strategies of consumer attitude	2	3	2	3	3

			formation and change					
		CO3	To appraise the various consumer decision making models	1	2	3	2	2
		CO4	To design the value creation and diffusion strategies	3	1	2	3	3
		CO1	To understand the potential roles as executives of service producing organizations	2	2		1	2
		CO2	To evaluate the service problems and provide prepare insights to solve the issues.	2	3	3		
MB834	Services Marketing	CO3	To assess the various marketing and competitive strategies for service industries.	2		1		2
		CO1	To develop Customer relationship management frameworks using the concepts learned in the course	3	1	1	2	2
		CO2	To develop strategies for implementing CRM practices in any organization solve the issues.	1	3	1	2	2
MB835	Customer Relationship Management	CO3	To assess the various marketing and competitive strategies using CRM techniques.	2	1	1	2	1
		CO1	To develop a comprehensive marketing research plan.	2	1	1	3	2
		CO2	To prepare marketing research blue print and research reports.	2	2	1	2	1
MB836	Marketing Research	CO3	To assess the various marketing and competitive strategies using marketing research techniques.	1	2	1	2	3
		CO1	To evaluate the role of advertising for business improvement.	1	2	3	3	3
		CO2	To design the creative advertising strategies for business situations.	1	2	3	2	3
		CO3	To understand the process of Advertising Planning and Budgeting.	2	1	2	3	2
MB837	Advertising Management	CO4	To develop integrated marketing communications strategies.	2	3	1	2	2
		CO1	To understand the field sales environment.	1	2	2	3	3
		CO2	To create sales tactics by using real time applications.	1	3	1	3	2
MB838	Sales Management	CO3	To understand the process of sales performance	1	1	1	3	3
		CO1	To evaluate the important strategic from product and market context.	2	2	1	2	1
		CO2	To understand the role of tools and techniques to prepare strategic decisions.	1	1	1	2	2
MB839	Strategic Marketing	CO3	To assess the future business opportunity from a strategic point of view.	1	2	1	3	2
		CO1	To identify common definition of the metrics being used in marketing today.	2	1	1	3	2
MB840	Marketing Metrics	CO2	To identify metrics that should be	1	2	2	2	1

			used by marketers.					
		CO3	To describe the use marketing metrics.	3	2	1	1	1
		CO4	To create the link from marketing expenditures to the financial well-being and to take an effective marketing decisions.	2	3	1	2	2
MB841	Analytics for Strategic market planning	CO1	To take data empowered strategic marketing decisions by using analytical techniques.	2	3	2	3	2
		CO2	To sharpen their analytical skills by getting exposure to computer-based marketing models and tools for decision making.	1	3	2	2	1
		CO3	To assess the future business opportunity from a marketing analytics point of view.	1	3	1	1	2
MB842	Analytics for Strategic market Implementation	CO1	To take data empowered decisions by using analytical techniques in the area of marketing strategies.	1	3	1	2	2
		CO2	To develop market-based product, integrated marketing communications, price and promotions, and sales force and channels strategies.	1	2	1	2	3
		CO3	To improve skills in viewing marketing processes and relationships systematically and analytically.	1	3	1	2	2
MB843	Business Market Management	CO1	To prepare business marketing strategy to create customer value across several application areas.	2	2	1	3	3
		CO2	To understand the business market needs and solve their problems accordingly	1	3	1	2	3
		CO3	To assess the market conditions and develop product launch planning accordingly	1	3	1	3	2
MB844	International Marketing	CO1	To understand the international marketing scenario.	3	1	1	2	3
		CO2	To create international marketing strategies for different goods and services.	3	1	1	3	3
		CO3	To assess the future business opportunity in International Marketing	1	3	2	3	3
MB845	Digital Marketing	CO1	To create digital marketing campaigns.	1	1	2	3	3
		CO2	To analyse the competitor mixes and provide strategic solutions to digital marketing mixes.	2	3	1	3	2
		CO3	To assess the omni market conditions and create a comprehensive digital marketing plan	1	3	1	2	3
MB846	Neuro Marketing	CO1	To view the marketing communications from psychological and behavioural aspects	3	2	1	1	1
		CO2	To explain Brain anatomy and	1	1	1	1	2

			functionality (neuroanatomy and neurophysiology) and techniques used to register human brain activity.					
		CO3	To prepare an effective marketing plan as to attract various consumer segments based on their neuro-sensory behaviors.	3	2	1	1	2
Financial Management								
		CO1	To identify and describe the roles and functions of various financial institutions, including banks, insurance companies, investment firms, and non-banking financial companies (NBFCs)	3			2	3
		CO2	To explain the characteristics and purposes of a wide range of financial products offered by these institutions, such as loans, mortgages, insurance policies, investment funds, and securities.	1	2		2	1
		CO3	To understand and articulate the different financial services available to businesses, including asset management, wealth management, financial advisory, and underwriting services.	1	3		2	3
MB851	Financial Institution and Services	CO4	To analyze and assess the suitability and effectiveness of different financial services and products for various business scenarios and strategic objectives, making informed recommendations based on their evaluations.		3		2	2
		CO1	To understand the mechanics of securities markets, types of securities, and sources of investment information.	3			1	2
		CO2	To analyse and evaluate the internal and market value of various securities, including firm and economic analysis.		3		2	1
		CO3	To conduct financial statement analysis and project earnings under stable and dynamic conditions, while considering risk and return factors.		3	2	1	
MB852	Investment Security Analysis and Portfolio Management	CO4	To apply portfolio theory, selection, and diversification techniques to build an efficient portfolio and assess portfolio performance	2	1		2	1
		CO1	To explain the fundamental concepts and types of derivatives, including forwards, futures, options, and swaps.	3	2		2	
MB853	Financial Derivatives	CO2	To use the analytical methods and mathematical models, such as the Black-Scholes model and binomial option pricing model, to accurately	1	3		2	

			value various types of derivatives.					
		CO3	To apply derivatives in developing and implementing simple corporate financial management strategies, such as hedging, risk management, and speculative strategies, to mitigate financial risks and enhance financial performance.		3	2	3	2
		CO4	To analyze and interpret the impact of derivatives on corporate financial statements and overall financial performance, making informed recommendations for their strategic use.		3		2	3
MB854	Investment Banking	CO1	To understand the role of investment bankers and the services they offer and to gain knowledge about the prevailing legal and industry frameworks of investment banking.	3			1	1
		CO2	To develop a conceptual understanding of the global and Indian investment banking process.	1		2	1	2
		CO3	To understand the guidelines for issue management and the process of IPO, management of capital issues, underwriting and brokerage, and marketing of public issues.	1			2	2
		CO4	To learn about disinvestment mechanisms such as buybacks, mergers, acquisitions, and delisting and understand the regulatory framework of investment banking, stock exchanges, and share brokers.		3		1	2
MB855	Asset Based Financing	CO1	To Understand the concept and scope of asset-based financing in corporate finance.	3	2			
		CO2	To Identify the different types of assets that can be used as collateral in asset-based financing.	2	3		3	
		CO3	To Analyse the legal and regulatory frameworks governing asset-based financing in India		3		3	2
		CO4	To Evaluate the creditworthiness of borrowers and manage the risks associated with asset-based financing. Apply the concepts and skills learned in real world financial scenarios		3		2	2
MB856	Behavioral Finance	CO1	To Illustrate the difference between expectations of efficient, rational investor behavior and actual behavior.	2	2		3	
		CO2	To explain the foundations of behavioural finance.	3			2	1
		CO3	To evaluate behavioural aspects of investing.		3		2	1

		CO4	To examine the various aspects of emotions and decision making of behavioural science.		3		2	3
MB857	Personal Finance	CO1	To understand the importance of personal finance and its role in achieving financial goals.	3	1		2	
		CO2	To develop effective money management strategies through budgeting and financial planning.		3	2	3	2
		CO3	To analyse and compare different financial services and credit options to make informed decisions.	2	3		2	1
		CO4	To understand different types of insurance and how to choose appropriate coverage.		3		2	2
MB858	Advanced Corporate Finance	CO1	To understand the application of stochastic models in risk and uncertainty analysis in capital budgeting.	1	3		2	
		CO2	To evaluate the different types of capital structure and the role of equity and debt in it and to analyze the efficiency of corporate financing in the market.		1		2	3
		CO3	To demonstrate knowledge of leasing concepts, evaluation, accounting, and legal aspects.	3	2		3	2
		CO4	To develop strategies for mergers and amalgamation in compliance with SEBI guidelines and corporate tax planning and understand the provisions for sickness and revival under BIFR.		2		3	2
MB859	Insurance and Pension Schemes	CO1	To analyze and compare different types of insurance and pension products available in the market.	1	3		1	
		CO2	To evaluate the benefits and drawbacks of different insurance and pension schemes.		3		2	2
		CO3	To understand the regulatory framework governing insurance and pension schemes in India.				3	2
		CO4	To develop skills in assessing individual and organizational needs for insurance and pension products.		1	3	2	2
MB860	Strategic cost Accounting and Management control	CO1	To develop an understanding of cost accounting principles and their application in different contexts.	3			3	1
		CO2	To understand the importance of performance measurement and management control systems in achieving organizational Objectives.		2	2	3	1
		CO3	To evaluate and apply different management accounting tools and techniques for strategic planning and control.		3		2	2

		CO4	To develop the ability to communicate and present management accounting information effectively.		1	1	3	2
MB861	Tax Laws and Tax Planning	CO1	To apply tax planning techniques in real world scenarios.	3			2	2
		CO2	To gain a comprehensive understanding of the Indian taxation system and its impact on businesses.		3	2	1	
		CO3	To analyze and interpret the tax laws and regulations in India.		3		2	2
		CO4	To identify and evaluate the tax implications of various business decisions and to develop tax efficient strategies for businesses	1	2		3	2
MB862	Treasury Management	CO1	To demonstrate an understanding of the role and function of treasury management in corporate finance.	1	2		2	
		CO2	To Identify and evaluate different financial instruments and techniques used in treasury management.	3	2		1	2
		CO3	To develop skills in cash management, foreign exchange management, and risk management.		3	2	2	
		CO4	To analyse and interpret financial data to make informed decisions in treasury management and to apply treasury management concepts and techniques to real world financial scenarios.		3	2	2	2
MB863	International Finance	CO1	To develop an understanding of international financial markets and its instruments.		2		3	1
		CO2	To understand exchange rate mechanisms, currency risks, and their management.	1	2		3	
		CO3	To acquire knowledge of international financial institutions and their roles through which develop skills to analyse and evaluate global investment opportunities.	2	1		2	2
		CO4	To understand the regulatory framework of global financial markets.		2	1	2	3
MB864	Corporate Valuation	CO1	To understand and apply various methods of valuing a company, such as discounted cash flow analysis, relative valuation, and asset-based valuation.	3	2			3
		CO2	To conduct financial statement analysis to determine a company's financial health and performance.		2		1	3
		CO3	To evaluate the strengths and weaknesses of different valuation techniques and choose the appropriate method for a given business.		3	2	1	
		CO4	To apply corporate valuation techniques to real world scenarios		2	2	2	3

			and make informed decisions based on the results.					
MB865	Financial Risk Analytics	CO1	To understand the different types of risks involved in the finance industry and their sources.	3	2		2	
		CO2	To analyze and manage credit, market, and operational risks using various tools and techniques.		3		3	2
		CO3	To evaluate and measure risks in financial instruments such as derivatives, swaps, and credit ratings.		2		2	1
		CO4	To explain the regulatory framework and legal issues involved in risk management through which the students will be able to implement integrated risk management strategies for businesses.		1	3	2	3
MB866	Introduction to FinTech	CO1	To examine the evolution of the financial technology industry	3	2			3
		CO2	To relate how financial technology is reshaping financial services	3	2		2	
		CO3	To Illustrate the technical know-how of financial technology		3		3	
		CO4	To demonstrate the current global landscape of financial technology Industry (Fintech)		3		1	3
Operations Management								
MB871	Production Planning and Control	CO1	To understand the sequential planning process in operations decision making	3	2		3	1
		CO2	To address the problems of locating, designing, planning and production of production facilities	3	2		2	1
		CO3	To prepare basic production reports	3	1		1	1
MB872	Logistics Management	CO1	To learn about the basic logistics activities and concepts such as transportation warehousing and distribution and how these activities contribute to the overall supply chain strategy	2	3			1
		CO2	To apply logistics concepts and principles to practical situations and solve problems related to logistics and supply chain management		2			
		CO3	To apply these skills and knowledge to optimize logistics activities and create value for the organization contributing to its success	2	3		1	2
MB873	Supply Chain Management	CO1	To understand the business operations	3	2		3	
		CO2	To identify and solve problems relating to supply chain management	3	2		3	
		CO3	To solve industry problems	3	2		1	2
MB874	Services Operation Management	CO1	To apply the key principles tools and techniques of service operations management to design plan and	3	3		1	

			manage efficient and effective service delivery processes.					
		CO2	To analyze service operations identify opportunities for improvement and develop appropriate strategies to enhance service quality customer satisfaction and profitability.	1	2		1	
		CO3	To evaluate different service delivery channels manage service capacity and demand and apply relevant performance metrics to monitor and control service operations.		3		2	2
MB875	Advanced Materials Management	CO1	To develop analytical skills to critically analyze and evaluate complex materials management scenarios, identify problems, and apply advanced tools and techniques to solve them.	2	3			2
		CO2	To gain an in depth understanding of advanced concepts, theories, and principles related to materials management.	1	3		1	3
		CO3	To effectively manage inventory by utilising selective inventory strategic policies	1	2	2		
MB876	Advanced Operation Research	CO1	To apply advanced principles and techniques of operations research to identify and solve complex optimization problems in various fields such as transportation, manufacturing, supply chain, and healthcare.	2	3			1
		CO2	To use linear, nonlinear, integer, and dynamic programming, queueing, decision making, and simulation models to optimize processes, increase efficiency, reduce costs, and improve overall performance.	1	3			2
		CO3	To equip with the necessary skills and knowledge to work in various industries and organizations as operations research analysts, management consultants, data analysts, or supply chain analysts.	1	3	2		1
MB877	Technology Forecasting	CO1	To understand about technology forecasting and its impact on decision-making.	3	2			2
		CO2	To explain various quantitative and qualitative forecasting methods and develop skills in assessing and managing technological change.		3	1		2
		CO3	To make informed decisions based on technology forecasting and its impact on their organizations.	1	3		2	1
MB878	Manufacturing Strategy	CO1	To understand the concept and the importance of manufacturing strategy for industrial enterprise	3	2			2

			competitiveness.					
		CO2	To identify formulation and implement strategies for manufacturing and therefore enterprise competitiveness		2		2	
		CO3	To evaluate and identify the strengths weaknesses opportunities and threats (SWOT analysis) of the manufacturing sector	3	2			3
MB879	Supply Chain Analytics	CO1	To model time series data	3	3		3	1
		CO2	To solve dynamic inventory problems and transportation network problems	3	3		3	1
		CO3	To implement heuristic solutions for NP Hard problems	3	3		3	1
MB880	Lean Manufacturing	CO1	To understand the fundamental principles of Lean manufacturing and how they apply to various industries and processes.	3		1		2
		CO2	To learn to use tools and techniques such as 5S, VSM, RCA, and Kaizen to identify and eliminate waste.	3	2	1		
		CO3	To develop Skills in process improvement, waste reduction and continuous improvement.	3	1	1		2
MB881	Game Theory and Applications	CO1	To explain the fundamental concepts of game theories.	3	3			
		CO2	To examine how to utilize zero sum games.	3	3			
		CO3	To evaluate the paradoxes and strategic manipulations and various game theory applications.	3	3			
MB882.	Behavioral Operations Management	CO1	To explain the fundamental concepts, theories, and frameworks of Behavioural Operations Management and their relevance to operational decision-making.	1			2	2
		CO2	To evaluate behavioural factors influencing supply chain coordination, service operations, project management, and organizational performance.	1		2	2	
		CO3	To apply behavioural theories and analytical techniques to diagnose and address operational inefficiencies arising from human decision-making.		1	2	2	2
		CO4	To design evidence-based interventions, nudges, and managerial strategies to improve operational effectiveness, workforce performance, and customer experience.			2	2	2
Business Analysis & IT Consulting								
MB891	Introduction to Business Analysis and IT Consulting	CO1	To develop consulting framework for a given IT problem.	3	1			1
		CO2	To understand the different stages of	2	1		2	1

			consulting waterfall methods and agile methods.					
		CO3	To apply appropriate techniques to develop IT frameworks.	2	1	1		1
		CO4	To prepare a consulting protype for a given problem	3	3	1		2
MB892	Business Analysis and ITC in Marketing and Retail	CO1	To analyse the business analysis problem scenario in in Marketing and Retailing.	2	2			1
		CO2	To have the knowledge to carry out IT integration projects in Marketing and Retail domains.	2	2			1
		CO3	To apply appropriate techniques to develop IT frameworks in the area of Marketing and Retail	2	2	1		1
		CO4	To prepare a consulting protype for a given problem in the area of Marketing and Retail	3	3	1		2
MB893	Business Analysis and ITC in Banking and Financial Services	CO1	To apply their skills for carrying out business analysis in BFS domain	2	2			1
		CO2	To will evaluate growing trends and IT developments in the Banking and Financial services domain and frame appropriate strategies for given problem.	2	2			1
		CO3	To apply appropriate techniques to develop IT frameworks in the area of BFS	2	2	1		1
		CO4	To prepare a consulting protype for a given problem in the area of BFS	3	3	1		2
MB894	Business Analysis and ITC in Manufacturing	CO1	To analyse the business analysis problem scenario in Operations and Manufacturing domains.	3	1		2	2
		CO2	To have the knowledge to carry out IT integration projects Manufacturing domains.		3			
		CO3	To apply appropriate techniques to develop IT frameworks in the area of Manufacturing	2		1		
MB895	Systems Analysis and Design	CO1	To understand stages of system development and to create framework to solve information systems problem	3	1		2	
		CO2	To analyze and develop process flow diagram (DFD's, E R) and logic diagram and Use Case using UML for system development	3	3			
		CO3	To write business document Plan and undertake a minor project, prepare and deliver structured written technical system development report using learned tools at class.	2	2			2
MB896	Software Project Management	CO1	To understand the process, methods, Measurements, quality, risk involved in Software project management	3	2	1	2	2
		CO2	To understand the scenario of operations of software industry in	2				2

			software development					
		CO3	To work on s/w project planning, Scheduling, progress assessment and cost estimation using supporting tools to manage software projects (MS Project, CASE tools, MTA PROIT, COCOMO and so)	1	3			2
MB897	Software Quality Management	CO1	To gain knowledge on concepts and best practices of Software quality management	3				
		CO2	To create quality metrics and frameworks to analyse project quality	2	3			2
		CO3	To assess risk and define control measures for Software quality	2	2	1		2
Business Analytics								
MB911	Introduction to Business Analytics	CO1	To acquire skills in using analytical tools such as Excel, SQL, and R for analyzing big data, creating reports, and communicating insights	2	3		2	1
		CO2	To develop proficiency in using software tools for data analysis.		3		1	1
		CO3	To interpret and draw inferences from data analysis results.	2	3		1	1
MB912	Basic Data Analytics	CO1	To understand the fundamentals of data analytics including data types data sources and data structures	1	1			
		CO2	To utilize different statistical methods to analyze data and derive insights.	3	3		1	
		CO3	To create and interpret data visualizations using tools	3	3		2	
		CO4	To apply techniques for data driven decision making in various fields including business healthcare and social sciences.	3	3		1	
MB913	Big Data Analytics and Data Science	CO1	To determine suitable data analytics techniques for different business scenarios.	3	3		1	
		CO2	To analyze the theories and methods of data analytics.		3		1	
		CO3	To assess the applications of data science techniques in the field of management.	3	3		1	
MB914	Advanced Data Analytics	CO1	To gain proficiency in advanced statistical methods for analyzing complex data sets including regression analysis time series analysis and machine learning algorithms	1	1			
		CO2	To develop a deep understanding of data visualization techniques including the use of interactive dashboards and storytelling techniques to communicate insights from data analysis	3	3		1	
		CO3	To design and execute effective data collection and management	3	3		2	

			strategies including the use of advanced survey methods					
		CO4	To develop critical thinking skills required for effective decision making based on data insights	3	3		1	
MB915	Machine Learning Techniques	CO1	To understand the foundations of Machine Learning such as statistical learning theory model selection and cross validation	1	1			
		CO2	To have a strong understanding of supervised and unsupervised learning techniques including decision trees random forests k Nearest Neighbors Support Vector Machines and clustering algorithms	3	3		1	
		CO3	To clean and preprocess data including handling missing data feature scaling and normalization	3	3		1	1
MB916	Advanced Machine Learning Techniques	CO1	To Understand and apply advanced techniques for feature selection and feature engineering to enable effective machine learning models	3	1		2	
		CO2	To build and deploy different types of deep learning models like CNNs and RNNs for image processing natural language processing and graphical data analysis	3	3		1	
		CO3	To analyze and optimize machine learning models performance through model selection and validation techniques	3	3		1	
MB917	Data Mining Techniques	CO1	To Understand the basic concepts and techniques of data mining and its application to various domains		3		2	
		CO2	To Analyze and preprocess data for effective data mining.		3		2	1
		CO3	To Apply data mining tools and software to real world datasets and interpret the results.	3	2			1
MB918	Google Analytics	CO1	To Understand the fundamental concepts of web analytics and how Google Analytics fits into the larger analytics ecosystem		3		3	
		CO2	To Create custom reports and dashboards in Google Analytics to meet specific business needs.		3		3	2
		CO3	To Analyze and interpret data from Google Analytics to gain insights into website or app performance and user behaviour.			1	3	2
MB919	Text Analytics	CO1	To apply creative problem-solving techniques for customer need analysis and arrive at innovative solutions	3	2		2	1
		CO2	To understand different methods for Information extraction and classification	3			2	

		CO3	To know the Text for Prediction and basics of Python.	3			2	
MB920	Digital Analytics	CO1	To understand how data function adds value and demonstrates the value in business management.	3	3			
		CO2	To compare and explain how to optimize the different social media analytics for products and services.	3	3		2	2
		CO3	To assess the applications of digital analytics in the field of management.	3	2		1	1
MB921	Data Analytics Software Lab	CO1	To explain the fundamental concepts of data preparation and coding.	3	3			
		CO2	To compare and explain how to use multiple and logistic regression.	3	3		1	
		CO3	To evaluate the data figures using factor analysis and structural equation modeling.	3	3		1	
MB922	Applied Bayesian for Analytics	CO1	Understand the necessary Bayesian concepts from practical point of view for better decision making.	1			2	2
		CO2	Learn Bayesian approach to estimate likely event outcomes, or probabilities using datasets.	1		2	2	
		CO3	Gain "hands on" experience in creating and estimating Bayesian models using R and OPENBUGS		1	2	2	2
MB923	Operations Analytics	CO1	To understand the characteristics of data and selection of right statistical techniques for analysis	2	3			1
		CO2	To apply statistical tools to analyze data, draw conclusions, and make predictions about the future.		2		2	
		CO3	To better understand business problems and develop problem solving skills	2	3		1	
		CO4	To develop decision-making skills from interpretation of analysis results.	2	3	1		1
General Management								
MB931	Innovation and R&D Management	CO1	To learn about creativity innovation and uncertainty management in organizations	1	2		3	2
		CO2	To learn about the innovation process strategies for managing innovation and gain R and D management skills.		2		3	
		CO3	To develop leadership capabilities and critical thinking skills for managing innovation and uncertainty in an organization.			3		3
		CO1	To understand the basics of technology management including forecasting decision making technology transfer and intellectual property rights.	2	1		3	1
		CO2	To gain foundational knowledge and skills to assess and implement		2	2	2	2

			technology solutions in different contexts including multi criteria decision making techniques and legal and ethical considerations.					
MB932	Technology Management	CO3	To understand the issues in the implementation of new technologies at the organization level			2	3	3
MB933	Course of Independent Study	CO1	To independently develop a topic of enquiry	3	2	2	3	3
		CO2	To demonstrate an understanding of the research topic or area of the independent study chosen	1	2	1	2	3
		CO3	To produce a record of the learning achievements			2	2	2
MB934	Intellectual Property rights Management	CO1	To explain the fundamental concepts of Intellectual property rights.	2			3	
		CO2	To identify patent systems and conventions on IPRS.	1			3	
		CO3	To understand evaluation of the IP valuation and Licensing.	2			2	
MB935	Information and Internet Economics	CO1	To illustrate the basic concepts of information and the internet economy.	2			3	
		CO2	To analyse the online market mechanisms.	1	2		3	3
		CO3	To understand the software economics and information security.	1	1	1	3	
MB936	International Business and Strategy	CO1	To explain the fundamental aspects of International Business and the process of globalization.	2		1	3	
		CO2	To elaborate the role and functions of International Economic Institutions.	1			3	2
		CO3	To analyze the methods of foreign capital investment and role of technology	1		2	2	
MB937	Political Behavior in Organizations	CO1	Understand the importance and indispensable nature of politics in organizations	1			2	
		CO2	Identify the political landscape and political players in their organizations	1		2	2	
		CO3	Develop political skills and the will to effectively and actively engage in politics.			2	2	2
		CO4	Demonstrate effective strategies of engaging in constructive and ethical politics to promote their motives			2	2	2

3 - High; 2 - Medium; 1 – Low

PROGRAMME CORE

Course Code	**:**	MB711
Course Title	**:**	Organizational Structure and Design
Type of Course	**:**	PC
Prerequisites	**:**	Nil
Contact Hours	**:**	30

Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To introduce students to the fundamental concepts of organizations and organization theory.
CLO2	To explore the relationship between organizational purpose, strategy, and effectiveness, and the key principles of organizational structure.
CLO3	To analyse the key elements of open system design, including the environmental domains, inter - organizational relationships, and organizational technology.
CLO4	To examine organizational transformation, including life cycle stages, models of organizational growth and decline, and strategies for organizational control.
CLO5	To provide students with an understanding of the dynamic processes involved in managing organizations, including the role of culture, innovation, and technology in contemporary organization design.

Course Content

Organisations as systems - Dimensions of organisational Design - The evolution of organisational Theory and Design - Role of organization theory and design.

Organisational Purpose and Structural Design - strategy - design and effectiveness - Fundamentals of organisational structure - Open system Design elements.

The environmental domains - inter organisational relationships - organisational level manufacturing technology - organisational level service technology - Diversity Equity and Inclusion in Organizational Design.

Organisation size - life cycle stages - birth - population ecology model - growth and Greiner's models of organisational growth - decline - Inertia - and death - Weitzel and Jonsson's model of decline and organisational control - Sustainability and Corporate Social Responsibility in Organizational Transformation.

Organisational culture and ethical values - Innovation - Intrapreneurship - and Creativity - Innovation - and IT contemporary trends in organization design - Agile and Lean Organizational Design.

References

1.	Richard H. Hall "Organizations - structures, processes and outcomes", 8th edition, PHI, (2002).
2.	D K Bhattacharyya, "Organisational Systems, Design, Structure and Management", Himalaya Publishing House, (2009).
3.	Richard L. Daft, "Understanding the Theory and Design of Organizations", Cengage Learning, 11th edition, (2013).
4.	Gareth R. Jones and Mary Mathew, "Organisational Theory, Design, and Change", Pearson India Education Private Limited, 7th edition, (2017).
5.	B.P. Singh, T.N. Chhabra, "Organisation Theory and Behaviour", Dhanpat Rai and Co, (2010).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the key concepts of organizations and organization theory and their relevance in modern management practices.

CO2	To evaluate the key elements of open system design, including the environmental domains, inter - organizational relationships, and organizational technology
CO3	To assess organizational transformation, including life cycle stages, models of organizational growth and decline, and strategies for organizational control.
CO4	To apply knowledge of the dynamic processes involved in managing organizations, including the role of culture, innovation, and technology, to contemporary organization design.

Course Code	**:**	MB712
Course Title	**:**	Legal Aspects of Business
Type of Course	**:**	PC
Prerequisites	**:**	Nil
Contact Hours	**:**	30 Hours
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To familiarize students with the essential understanding of the legal environment in which consumers and businesses operate.
CLO2	To enable students to develop critical thinking and problem - solving techniques through legal procedures.
CLO3	To help students gain awareness of various business laws' applications to practical commercial situations.

Course Content

The Indian Contract Act 1872 - Essentials of a valid contract - Void Agreements - Definition of contract - Formation of a contract - performance of contracts - breach of contract and its remedies - Quasi Contracts - Contracts of Indemnity - Meaning - Right of Indemnity Holder and Indemnifier - Contracts of Guarantee - Types of Guarantee - Bailment and Pledge.

The Sale of Goods Act 1930 - Sales contract Goods: Meaning and Classifications - Transfer of title and risk of loss - Conditions and Warranties in sales contract - performance of sales contracts - conditional sales and rights of an unpaid seller. Nature of agency - Creation of agency - types of agents - Agent's authority and liability of principal and third party - Termination of agency.

The Companies Act 2013 and FEMA 1999 - Meaning and Definition of Company - Major Principles and Theories - Nature and Types - Formation: Memorandum and Articles of Association, Prospectus and other Constituent Documents - Directors Powers and Duties - Mergers and Amalgamation - Winding Up of companies. Introduction to FEMA 1999 - Major Concepts - Important Provisions.

The Consumer Protection Act 2019 - Consumer Protection Act 2019 Salient features - Aim and Important Definitions - Consumer Complainant - Goods - Service - Meaning of Consumer Dispute - Complaint - Unfair Trade Practices - Restrictive Trade Practices - Rights of Consumers - Consumer Protection Councils - Central Consumer Protection Authority - Three - tier Grievance Redressal Machinery.

The Information Technology Act 2000 and The Right to Information Act 2005 - The Information Technology Act - 2000 - Aims and objectives and 2002 - Digital Signature - Digital Signature Certificate - Electronic Governance - Electronic Records - Certifying Authorities - Penalty and Adjudication - Introduction to Cyber Laws - Cybercrimes. RTI Act 2005 - Applicability of the Act - Mechanism and Scope of the Act - Important provisions.

References

1.	Ravinder Kumar, “Legal Aspects of Business,” Cengage Learning India, 5th Edition (2021).
2.	N. D Kapoor, “Elements of Mercantile Law,” Sultan Chand and Sons, 38th Edition (2020).
3.	Tejpal Sheth, “Business Law,” Pearson Education, 3rd Edition (2017).
4.	N.D Kapoor, “Elements of Company Law,” Sultan Chand and Sons, 31st Edition, (2018).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand key business laws, including the Indian Contract Act, Sale of Goods Act, Companies Act, Consumer Protection Act, FEMA, Information Technology Act, and RTI Act.
CO2	To develop skills to analyze legal issues and solve problems using business laws.
CO3	To apply business laws in real-world situations, including handling contracts and ensuring regulatory compliance.
CO4	To interpret important business laws and assess their implications on operations, ensuring they can provide advice on legal compliance and ethical business practices.

Course Code	**:**	MB713
Course Title	**:**	Business Statistics
Type of Course	**:**	PC
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To make students understand how to gather, analyze, and interpret data and the importance of statistics and statistical methods for applicability to business scenarios.
CLO2	To create an understanding on different statistical techniques for data analysis and decision making in business perspective.

Course Content

Introduction to Statistics - Measures of Central Tendency - Measures of Dispersion in Frequency Distribution.

Rules - Probability under conditions of Statistical independence and dependence - Bayes Theorem - Probability Distributions - Binomial - Poisson - Normal distribution.

Sampling and Sampling Distribution - Types of sampling - Concept of Standard Error - Sampling from normal and non - normal population - Central Limit Theorem.

Testing Hypotheses Significance level - Type and Type II error - One tail and Two tail tests - Hypothesis Testing of means - proportion - z - test - t - test - Chi - Square Test - F - distribution - Analysis of variance (ANOVA) - One way and Two - way ANOVA - Introduction to simple regression and correlation.

Non - Parametric methods: Median Test - Kolmogorov - Smirnov Test - Mann - Whitney U - Test -

Wilcoxon matched pair T - Test - Kruskal Wallis Test.

References

1.	Richard I. Levin and David S. Rubin, 'Statistics for Management', Prentice Hall of India, 8th edition' (2017).
2.	Srivatasava, Shenoy and Sharma, 'Quantitative Techniques for Managerial Decision Making', New Age International Pvt. Ltd.,3rd edition, (2011).
3.	G C Beri, " Business Statistics", Tata Mc Graw Hill, 3rd edition,(2017).
4.	T N Srivastava, Shailaja rego, "Statistics for management", Tata McGraw - Hill Publishing Company Ltd.,3rd edition (2017).
5.	Linda Herkenhoff, John Fogli, "Applied Statistics for Business and Management using Microsoft Excel", Springer, 1st edition, (2013).
6.	Donald R. Cooper, Pamela S. Schindler and J K Sharma, "Business Research Methods", Tata Mc Graw Hill, 12th Edition (2018).
7.	Uma Sekaran and Roger Bougie, "Research methods for Business", Wiley India, 8th Edition, (2019).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the characteristics of data and selection of right statistical techniques for analysis
CO2	To apply statistical tools to analyze data, draw conclusions, and make predictions about the future.
CO3	To better understand business problems and develop problem solving skills
CO4	To develop decision-making skills from interpretation of analysis results.

Course Code	**:**	MB714
Course Title	**:**	Financial Reporting and Analysis
Type of Course	**:**	PC
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide students with a basic understanding of financial accounting concepts and principles, as well as their practical application.
CLO2	The course aims to introduce students to the mechanism of double-entry bookkeeping, inventory accounting, and depreciation accounting
CLO3	To enable students to critically analyse corporate financial statements.
CLO4	The students should be able to apply their knowledge of financial accounting to analyze and interpret financial statements and make informed business decisions.

Course Content

Meaning, Functions and Sub fields of Accounting - Accounting Cycle – Accounting Principles- Concepts & Conventions - Accounting Equation - Types of Accounts - Rules of Debit & Credit Analyzing transactions - Recording transactions - Posting to ledger - Balancing the accounts - Preparing Trial Balance

Journalizing adjustment entries - Preparing Adjusted Trial Balance - Passing the closing or transfer entries - Preparing financial statements – Profit & Loss account – Balance sheet preparation.

The basics of inventory - Inventory accounting systems - Inventory valuation methods - Accounting for inventory - Inventory and its impact on financial statements - Basic concepts of depreciation - The methods of depreciation - Accounting for depreciation.

Financial Statement analysis - Ratio analysis - Use of Ratios in interpreting Financial Statements - comparative, common size analysis - Using financial statement analysis in decision making.

Financial reporting practices in India - Developments - Recent trends in reporting practices - Introduction to Companies Act 2013 - Corporate governance and financial reporting.

References

1.	Maheshwari S N and Maheshwari S K, “An Introduction to Accountancy”, Vikas Publishing House, 9th Edition, (2007).
2.	James M. Wahlen, Stephen P. Baginski, and Mark Bradshaw, Financial Reporting, Financial Statement Analysis, and Valuation: A Strategic Perspective by South-Western College Pub; 8th edition (2018).
3.	Tulsian, P. C., and Tulsian, Bharat. Financial Accounting. Pearson Education India (2020).
4.	Maheshwari S.N. and Maheshwari S.K., “Advanced Accountancy”, Vikas Publishing House, 12th Edition, (2022).
5.	Gupta, R. K. (2020), Financial Accounting for Management. PHI Learning Private Limited.
6.	Ashok Banerjee and Sudipta Karmakar, Fundamentals of Financial Accounting, Oxford University Press, 4th Edition, (2019).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To demonstrate and apply fundamental financial accounting concepts and principles to various accounting scenarios.
CO2	To accurately perform double-entry bookkeeping, and properly account for inventory and depreciation in financial records
CO3	To critically evaluate and interpret corporate financial statements, identifying and analyzing key financial metrics
CO4	To utilize their financial accounting knowledge to analyze financial data, interpret financial statements, and make informed business decisions

Course Code	**:**	MB715
Course Title	**:**	Marketing Management - Concepts and Design
Type of Course	**:**	PC
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand the concepts of marketing in theory and practice.
CLO2	To learn the buying behavior of the consumer.
CLO3	To explore the strategies for new product development.
CLO4	To develop the analytical perspectives for students on effective marketing decisions.

Course Content

Core concepts of Marketing - Need, Want, Markets, Product vs Services - Evolution of Marketing Concept - Scanning the Environment - Sustainable Marketing.

Factors influencing consumer behaviour - Buying decision process - Organisational buying - Value creation to consumer, Customer satisfaction - Customer Delight - Relevant Case Studies.

Demand - Demand Forecasting Techniques - Segmentation: procedures and Benefits - Niche Market - Targeting - Positioning: Meaning and strategies - Case Studies.

Market Offering - Meaning of New product - Types of New Product - Stages in New Product Development - Product Life Cycle - Stages - Managing PLC.

Marketing Planning Process - Marketing Strategies for leaders, followers and challengers - Global Marketing - Trends in Marketing - Digital Marketing strategies - Relevant case studies
.

References

1.	Kotler, Philip and Gary Armstrong, Principles of Marketing, 17th Edition. Pearson (2018).
2.	Philip Kotler, Keller, Koshy, Jha, Marketing Management, 15th edition, Pearson, New Delhi (2017).
3.	Ramaswamy and Namakumari, Marketing Management, TMG, New Delhi (2018).
4.	Rajan Saxena Marketing Management, 6th Edition. Tata McGraw Hill, New Delhi (2019).
5.	R.L. Varshney and S.L. Gupta Marketing Management Indian perspective, Sultan New Delhi (2005).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To Scan the marketing environment.
CO2	To capture the insights of the consumers
CO3	To design the marketing strategies.
CO4	To design and develop the new product strategies.

Course Code	**:**	MB716
Course Title	**:**	Business Communication
Type of Course	**:**	PC
Prerequisites	**:**	None
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand the importance of communication and its concepts, goals, and communication networks in business.
CLO2	To enhance effective listening and develop techniques for persuasive speaking in personal and professional life.
CLO3	To develop strategies for direct and indirect approaches to business messages and use

	persuasive argumentation in business writing.
CLO4	To create skill set for business and professional letter writing.
CLO5	To evaluate the essence of technology in communication, including the limitations in making professional presentations.

Course Content

Introduction to communication - Nature and Importance of Business Communication - Levels of communication - Tools and Networks of Communication - Barriers in Communication - Organisational and Personal goals - Strategies for improving organizational communication - Psychology of communication - Role of mind in communication.

Fundamentals of Oral Communication - Oral Communication requirements - Business Conversation - Nonverbal communication - Listening and Non-verbal cues - Types of listening - Purposive listening - Effective listening and Feedback - Psychological Barriers to Listening - Body language - Presentation Skills.

Written Business Communication Basics - Techniques of business writing - Professional Resume Writing - Business and Professional Letter - Writing Reports, Circulars, Notices, Proposals - Press Releases - Minutes of the Meeting.

Negotiation Skills - Intercultural negotiation - Cross cultural communication - Interview Skills - Dictating - Lead effective meetings - Group Discussion - Group Dynamics in Communication and Public Speaking.

Telephone etiquette - Email Etiquette - Web Meeting Etiquette - Effective communication in social media - Use of Power Point and other aids - Role of Mass Media in Business Communication - Writing for Blogs - Personal web pages.

References

1.	Raymond Lesikar, Marie Flatley, Kathryn Rentz, Neerja Pande, Business Communication: Making Connections in a Digital World,11th edition, McGraw Hill Education, New Delhi (2017).
2.	Herta A Murphy, Herbert W. Hildebrandt & Jane Thomas, Effective Business Communication, Tata McGraw Hill (2008).
3.	Raman, M., and Singh, P, Business communication, Oxford Higher Education, (2006).
4.	Shirley Taylor, Communication for Business, Longman (2000).
5.	Matthukutty M Monippally , Business Communication Strategies ,Tata McGraw Hill, (2006).
6.	Guffy, M.E.Business presentations. Essentials of Business Communication. Mason, OH: South-Western Cengage Learning (2010).
7.	K.K. Ramachandran, K.K. Lakshmi, K.K. Karthick and M. Krishna Kumar, Business Communication, S.Chand, New Delhi, (2020).
8.	Gupta CB, Business Communication, Sultan Chand & Sons, New Delhi, (2018).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the process and concepts of Business Communication
CO2	To comprehend the importance of effective listening and develop persuasive techniques for writing and speaking skills.
CO3	To communicate information in a simple, clear, concise and percise form for the smooth

	functioning of the organization.
CO4	To manage change through effective interpersonal communication.
CO5	To apply skills by using technology and communicate effectively in different business situations

Course Code	:	MB717
Course Title	:	Microeconomics
Type of Course	:	PC
Prerequisites	:	None
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To introduce theories and concepts in microeconomics for managerial decision making.
CLO2	To understand the concepts of demand, supply and elasticity of demand and supply.
CLO3	To familiarize with the production, cost and volume functions and its relationships.
CLO4	To understand and apply the different types of competition, pricing, and capital expenditure in organizational context.

Course Content

Nature, Scope and Importance of Microeconomics in Managerial Decision Making - Micro economic analysis & its relationship to functional management - Utility analysis of Consumer Behaviour - Indifference curve analysis - Diminishing marginal utility, Equi - Marginal utility, and revealed preference theory.

Demand Supply analysis - Price Elasticity of Demand - Price Elasticity of Supply - measurement, and applications - Consumer Choices and impact of Changes in income and Prices - Demand Forecasting Methods.

Production Function - Factors of production or inputs - ISO cost, ISO Quant - expansion path returns to scale - increasing, constant and diminishing returns - Return to scale - Cost Volume Profit analysis - Marginal costing - short run and long run cost curves.

Market Structure and its characteristics - Perfect competition - Monopoly - Monopolistic competition - Oligopoly - Monopoly and Antitrust policy – New age digital marketplace - Price output determination and shape of revenue - Cost curves under various types of competition - Profit maximization during short run and long run under various types of competition - Game Theory and Competitive Strategy.

Product Pricing - Pricing methods and policies - Capital markets - Time Value of Money - Capital budgeting - Mergers and Acquisitions - Externalities and Public Goods.

References

1.	Robert S. Pindyck and Daniel L. Rubinfeld, Micro Economics , Pearson education, 5thEdn.
2.	H. L. Ahuja, Principles of Microeconomics, S.Chand, (2016).
3.	D.N. Dwivedi, “Microeconomic Theory and Applications”, Vikas Publications, 3rd Edition, (2016).
4.	H. L. Ahuja, “Modern Microeconomics Theory and Applications”, S.Chand, 19e, (2022).
5.	Paul G Keat, Philip K.Y.Young, “Managerial Economics”. Pearson Education, 5e,(2006).

6.	David Shapiro, Daniel Macdonald, and Steven A, “Principles of Microeconomics”, Rice University, 3e, Houston, (2022).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the concepts of Microeconomics.
CO2	To describe and apply demand - supply concepts and its elasticities in the contexts of corporate and government levels.
CO3	To explain the relationship between Production, Cost, Volume and Profit functions and its applications.
CO4	To relate the various types of competitions in the market structure in the real world.

Course Code	**:**	MB718
Course Title	**:**	Indian Ethos And Business Ethics
Type of Course	**:**	PC
Prerequisites	**:**	None
Contact Hours	**:**	15
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand the need and importance of Indian ethos, Value systems, human values, Professional and business ethics
CLO2	To inculcate the concepts of business, managerial and organizational ethics that assist students in developing a better understanding of business processes
CLO3	To instill practical importance of ethical behavior in their personal and professional lives

Course Content

Indian Ethos - features and Importance - Ideas, Thoughts and role of Indian Ethos for effective Management - Business Ethos and principles practiced by Indian Companies - The value - oriented holistic Management - Thirukkural in Management (Chapter on Managing, Leadership, Situation handling, Decision Making) - Social System - Social Structure – Voters Education and Electoral Awareness of Indian Citizens

Human values - Role of Family and Education - Integrity - Work ethic - Civic virtue - Codes of Ethics - Personal and Ethical dilemmas - Emotional Intelligence - Building character in the workplace - Collegiality - Moral Values - Spirituality for individual and corporate excellence.

Professional ethics - Virtuous Leadership - Qualities of a New age manager and leader - Ethical decision making - the Virtue theory - the Casuist theory - Teleological and deontological ethics - Social Intelligence - The nature of business ethics - Business and ethics relativism - Ethical issues in Digital business environment - Business Ethics in the multicultural context - Value creation to stakeholders

References

1.	Bajpai, B. L.Indian Ethos and Modern Management: Amalgam of the Best of the Ideas from the East and the West, New Royal Book Company (2008).

2.	Sinha, Zaware Nitin, Barbate and Thite, "Indian Ethos and Business Ethics", Nirali Prakashan publications, 2nd Edition (2021).
3.	S, Pallavi, "Management concepts in Thirukkural", Mayas Publication, 1st Edition (2018)
4.	Velasquez, M. G., "Business ethics: Concepts and cases", Pearson Education South Asia Pvt Ltd, 7th Edition (2018).
5.	A.C. Fernando, K P Muralidheeran and E K Satheesh, "Business Ethics: An Indian Perspective" Pearson Education, 3rd Edition (2019).
6.	N.M. Khandelwal, "Business Ethics: Corporate Governance CSR and Indian Ethics and Values, 2nd Updated Edition, Misha Books (2020)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the theoretical underpinnings of Indian ethos, professional and business ethics
CO2	To describe and demonstrate the significance of community and ethical behavior in business
CO3	To validate their understanding of business and economic concepts from an ethical stance
CO4	To evaluate and critically assess their managerial values, as well as the significance of ethical dimensions in industry and workplace decision-making

Course Code	**:**	MB721
Course Title		Managing People in Organization
Type of Course	**:**	PC
Prerequisites	**:**	None
Contact Hours		30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To learn how individuals, behave in the context of an organization
CLO2	To understand how employee's perspectives, facilitate/hinder organizational performance
CLO3	To comprehend the group behaviour and its implications on organizational performance
CLO4	To apply the concepts and theories in addressing organizational issues and problems

Course Content

Definition of organizational behaviour (OB) - Disciplines that contribute to the OB field – Conceptual framework - Contemporary challenges and opportunities in managing people – Organizational behaviour models

Job Attitudes - Components - Measurement – Perception - Attribution Theory – Individual Decision Making – Personality - Determinants – Personality framework – Values in the workplace

Learning: Theories of learning, Organizational learning – Types, Motivation – early theories of motivation – contemporary theories of motivation – Motivation and job design – Alternative work arrangements

Group behaviour and work teams – Group decision Making – Communication - Leadership: Styles

– Theories of leadership: Trait, Behavioural, Contingency and Contemporary theories - Power and Politics

Organizational culture – creating and sustaining culture - Organizational change – managing change - approaches – Stress - Causes and Effects - Coping strategies - Organizational Development

References

1.	Stephen P. Robbins, Timothy A. Judge and Neharika Vohra, “Organizational Behaviour” Pearson, updated 18th edition (2022).
2.	Fred Luthans, Brett C. Luthans and Kyle W. Luthans, “Organizational Behavior: An Evidence-Based Approach”, IAP, 14th edition (2020)
3.	Nelson, D.L., Quick, J.C. & Khandelwal, P. ORGB: A South-Asian Perspective, Cengage Learning, 2nd Edition (2016)
4.	HBR's 10 Must Reads on “Managing People” (2016)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the individual differences and gain the ability to manage people at workplace
CO2	To evaluate employee perspectives and its implications on the individual and organizational outcomes
CO3	To assess the significance of group behavior in determining the organizational performance
CO4	To apply appropriate concepts and theories to manage people in an organization

Course Code	**:**	MB722
Course Title	**:**	Information Management
Type of Course	**:**	PC
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide a comprehensive overview of information systems by connecting IS and business performance.
CLO2	To provide knowledge on System development methodology and IT infrastructure for applications

Course Content

Digital Business Transformation - Information System: Concepts - IS in Organizations - Types of Information Systems - Business Perspectives of IS - IS in Business Functions - Strategic perspectives of IS and its competitive advantage in business. IS impact in organization.

Business Hardware and Software - Software - as - service - Enterprise Resource Planning - Supply Chain Management Systems - Customer Relationship Management Systems - Expert System -

Block Chain Technology in Business - E - Business and E - Commerce applications.

Overview of system development - System Development Life Cycle - Prototyping - Structuring system process requirements - Structuring system logic requirements - Structuring system data requirements.

Database Management Systems: Database models - Data Warehouse - Business Intelligence: Framework - Business Analytics - OLAP - Data Mining - Artificial Intelligence for Business - Dashboards - Balance scorecards.

Challenges of Global Information System - Ethical and Societal issues - Outsourcing Risk in IT services - Security measures: Network security - Licensing applications.

References

1.	Kenneth C. Laudon, Jane P. Laudon," Management Information Systems" 15th Edition, Pearson publishing company, New Delhi, (2018).
2.	James O'Brien, George Marakas, "Management information Systems",10th Edition, Tata McGraw Hill, New Delhi, (2017).
3.	Hoffer, George and Valacich, "Modern Systems Analysis and Design", 9th Edition Pearson Education, (2019).
4.	Kenneth J. Sousa and Effy Oz, "Management Information Systems", 7th Edition, Cengage Learning, (2015).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the different forms of Information systems in business perspective.
CO2	To understand IT infrastructure and its applications.
CO3	To know system development methodologies and tools.
CO4	To understand business in systems perspectives.

Course Code	**:**	MB723
Course Title	**:**	Operations Research
Type of Course	**:**	PC
Prerequisites	**:**	NA
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To help students understand the basics of Linear Programming and Mathematical Formulations
CLO2	To help students arrive at optimal or near-optimal solutions to complex decision-making problems.

Course Content

Introduction to Linear Programming - Introduction to Mathematical Formulation - Graphical method - Variants of Graphical Analysis - Introduction to Simplex solution

Production and Inventory Decisions - Blending Problems - Portfolio Selection and Finance Planning Problems - Marketing Research Problems - Work force Scheduling Problems

Quantitative Modelling of Transportation Problem - Unbalanced problem - Introduction to Assignment Problems - Variants of Assignment Model - Solving of Transportation and Assignment Problems using Excel

Introduction to Integer Programming - Binary Integer Programming - Mixed Integer Linear Programming.

Introduction to Queuing Models - Single Channel - Introduction to Non - Linear Programming Functions of more than one variable Maxima and Minima.

References

1.	Anderson, D.R., Sweeney, D.J., Williams, T.A. and Martin, K., An Introduction to Management Science: Quantitative Approach to Decision Making, 13th Edition, SouthWestern, (2012).
2.	Frederick S Hillier and Mark S. Hillier, An Introduction to Management Science (A Modeling and Case Studies Approach with Spreadsheets), 6th Edition, (2019).
3.	Hamdy A. Taha, “Operations Research – An introduction” PHI, edition, (2011).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand how to use quantitative methods and techniques for effective decision- making.
CO2	To use Linear programming and solution procedure using graphical method, simplex algorithm, and MS Excel
CO3	To comprehend about the transportation model, assignment model and its application
CO4	To understand the basics of Queuing theory and non-linear programming

Course Code	**:**	MB724
Course Title	**:**	Cost and Management Accounting
Type of Course	**:**	PC
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	The course will explain the concept of management accounting in taking financial decisions.
CLO2	To highlight the importance of cost in the business decisions making process
CLO3	To impart knowledge of Costing methods and techniques to the students.

Course Content

Definitions – Nature – Functions – Scope – Importance - Limitations and Conventions of Management Accounting - Distinction between Management Accounting and Financial Accounting - Installation of Management Accounting System - Budgeting - Functional Budget - Cash budget - Master budget - Flexible budget.

Introduction to Cost Accounting - Distinction between Cost Accounting and Management Accounting - Cost Classification - Cost sheet - Costing of Raw material - Labour and overheads - Cost ascertainment allocation and control.

Costing methods - Job costing - Batch costing - Contract costing - Process costing - Joint products and Bye products costing - Operating costing.

Standard Costing - Material and Labour variance - Variable costing vs Absorption costing - Cost volume profit analysis - Make or buy decision - Product mix decision - Utility of Costing for Managerial Decision.

Activity based costing vs Absorption costing - Cost drivers - Cost allocation - Cost hierarchy - Designing ABC systems - ABC in service organizations - Practical applications of ABC.

References

1.	Khan.M.Y and Jain, P.K, "Cost Accounting" Mcgraw Hill Education (India) Private Ltd.,New Delhi, Second edition, (2014).
2.	Colin Drury, "Management and Cost accounting", Cengage Learning India Private Ltd., Eighth edition, (2014).
3	Srikant M. Datar, Madhav V.Rajan, "Horngren's Cost Accounting" Pearson Education, Sixteenth Edition, (2017).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To explain the advanced approaches of Cost Accounting
CO2	To prepare a cost sheet and compare alternatives using costing methods.
CO3	To develop proper financial control with the use of costing techniques and budgetary control systems

Course Code	**:**	MB725
Course Title	**:**	Marketing Management – Planning and Control
Type of Course	**:**	PC
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To enhance knowledge on the 4Ps of the Marketing.
CLO2	To develop managerial decisions on designing, implementing and monitoring the marketing mix elements of marketing functions among students.
CLO3	To evaluate the marketing control techniques and modern trends in marketing.

Course Content

Product Assortment and Product Line Decision - Branding Strategies - Packaging – Intangible Products.

Planning the Channel of Distribution - Intermediaries Functions Vertical Marketing System - Retailing - Direct Marketing - Wholesaling - The Supply Chain and Marketing Logistics.

Elements - Integrated Marketing Communication - Advertising - Personal selling and Sales Management - Sales Promotions - Publicity - Public Relations.

Pricing Objectives - Pricing Strategies and Tactics - Price Adjustments - Pricing and the Law.

Organizing and Controlling the Marketing Function - The Business and Marketing Plan – The Marketing Audit - Marketing Arithmetic for Business Analysis.

References

1.	Armstrong and Philip Kotler, Marketing: An Introduction - 7/e. New Delhi: Pearson Education - (2007).
2.	Paul Baines - Chris Fill - Kelly Page - Piyush Kumar Sinha - Marketing: Asian Edition - 1/e. New Delhi: Oxford University Press - (2013).
3.	Philip Kotler - Kevin Lane Keller - Abraham Koshy - Mithileswar Jha. Marketing Management: A South Asian Perspective 13e. New Delhi: Pearson Education - (2010).
4.	William Pride, Marketing: Planning, Implementation and Control, Cengage Learning, New Delhi.

Course Outcomes (CO)

At the end of the course student will be able

CO1	To identify the 4Ps.
CO2	To take managerial decisions on designing - implementing and monitoring the marketing mix elements of marketing functions.
CO3	To evaluate the marketing control techniques and modern trends in marketing.

Course Code	**:**	MB726
Course Title	**:**	Macroeconomics
Type of Course	**:**	PC
Prerequisites	**:**	None
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To enable the students to understand the macroeconomic environment.
CLO2	To anticipate and understand the forthcoming changes in fiscal and monetary policies.
CLO3	To provide understanding about implications of government budgets and the policies of central bank, foreign trade and exchange rate on overall economy and corporate sector.
CLO4	To familiarize with the problems faced by an economy and its measures.

Course Content

Meaning and importance of Macroeconomics - Choice in world of scarcity Interdependence - Theories and models to understand economic issues - Types of economic systems - Measuring the size of the economy - National Income Components, concepts, measurement - Rules for Computing GDP - Real vs. Nominal GDP - Employment and GDP relationship.

Concept of Consumption - Average and Marginal propensity to consume - The Psychological Law of Consumption - Kuznets's Consumption Puzzle - The Keynesian perspective - The Philips Curve - Neoclassical perspective - Determinants of consumption, investment, and money demand - Marginal efficiency of the capital - Multiplier, Accelerator.

Macroeconomic policy goals - employment, price stability, and growth - Fiscal and Monetary policies - Inflation: Types, sources, consequence - Role of Government and Central bank in moderating inflation - Government budgets and Central bank regulations in India - Money and Banking - Measures of money supply M1, M2 and M3 - Introduction to Taxation in India - GST - Growth Models.

Economic Reforms - Indian Economy since 1991 - India's international trade and capital flows - Trade regulations and promotion in India - Exchange rate policy - Macroeconomic effects on exchange rates - Balance of Payment - Foreign Exchange markets - EXIM policy and FEMA - Convertibility of Rupee - WTO - Intellectual Property Rights - International Financial Institutions - International associations - G7, G20, ASIAN, SAARCC.

Globalization impact - Role of India in G20 - Sustainable Development - Macroeconomic policies around the world - Economic, Social and Environmental sustainability - Sustainable Development Goals in India and around the world - Emerging topics in Macroeconomics.

References

1.	Dewett. K.K., Modern Economic Theory, S. Chand and Co, New Delhi, (2005).
2.	Ahuja.H.L., Economic Environment of Business, S. Chand & Co, New Delhi, (2005).
3.	Francis Cherunilam., Business Environment, Himalaya Publishing, New Delhi, (2005).
4.	Francis Cherunilam., International Economics, Tata McGraw Hill, New Delhi, (2005).
5.	Olivier Blanchard and David R. Johnson, "Macro Economics", Pearson Education, 6th Edition, (2017).
6.	David Shapiro, Daniel Macdonald, and Steven A, "Principles of Macroeconomics", Rice University, 3e, Houston, (2022).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To explain the concepts of Macroeconomics and its interrelations with Microeconomics.
CO2	To associate the current economic phenomenon with existing theory and put their views on contemporary economic issues.
CO3	To apply the principle of Macroeconomics in explaining the behaviour of Macroeconomic variables at corporate, sectoral, national as well as global levels.
CO4	To extend the concepts of Macroeconomics in unfolding the dynamics of various business sectors.
CO5	To relate the significance of economic development and sustainability.

Course Code	**:**	MB727
Course Title	**:**	Business Intelligence Tools - Introduction
Type of Course	**:**	PC
Prerequisites	**:**	Nil
Contact Hours	**:**	15
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	Learn fundamentals of coding and how to think in code
CLO2	Understand the importance of structured data
CLO3	Implement analytical theory using computer software
CLO4	Develop business presentations using appropriate visuals

Course Content

Visuals for business presentation (Types and Purpose). General guidelines for choosing a visual (context, clutter, attention).

Working with MS Excel functions (entering, editing and copying formulas. Financial Functions, mathematical operations, fixing errors and data validation). Data Visualization (Charts and Pivot Tables). MS Word and Power Point (managing citations, adding references and some useful functions)

Installation of R and R-Studio. Open source data sets in R. Data processing & Hypothesis Testing in R.

Installation of Python and Python IDEs (Google Colab & PyCharm). Overview of popular packages (pandas, numpy, mathplot, sklearn, scipy and PuLP). Data cleaning & processing in Python. Business statistics in Python. Basic optimization & Dashboarding in Python.

Installation of Tableau and PowerBI. Developing visuals in Tableau and PowerBI. Dashboarding in Tableau and PowerBI (Story telling with data).

References

1.	"Story Telling with Data: A data visualization guide for business professionals" by Cole Nussbaumer Knaflic, Wiley
2.	"Data Visualization: Storytelling Using Data" by Sharada Sringeswara, Purvi Tiwari and U. Dinesh Kumar, Wiley
3.	"Microsoft Excel Data Analysis and Business Modeling" by Wayne L. Winston, Microsoft Press (2019).
4.	"An Introduction to Statistical Learning: with applications in R" by Gareth James, Daniel Witten, Trevor Hastie and Robert Tibshirani
5.	"Machine Learning using R" by Kumar Rahul and U. Dinesh Kumar, Wiley
6.	"Machine Learning using Python" by Manaranjan Pradhan and U. Dinesh Kumar, Wiley

Course Outcomes (CO)

At the end of the course student will be able

CO1	To use excel for data processing and analysis
CO2	To use R for statistical explorations
CO3	To build skills in Python programming
CO4	To develop dashboards for business applications

Course Code	**:**	MB728
Course Title	**:**	Design Thinking
Type of Course	**:**	PC
Prerequisites	**:**	None
Contact Hours	**:**	15

Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To instill design thinking approach that is key to innovation
CLO2	To understand and implement design thinking framework and apply design thinking tools
CLO3	To generate business solutions and alternate approaches that solves real-time problems using design-thinking approach

Course Content

Understanding Design Thinking - Problem solving – Visual Problem Solving – Identify and understand what customers need - target users - techniques for achieving deep customer understanding.

The three lenses of Innovation - Why Design thinking - Rudiments of Design Thinking - Use of Diagrams and Maps in Design Thinking – Empathy map. Affinity diagram, mind map, journey map, combining ideas into complex innovation concepts - Five phases of Design Thinking Framework - Design Thinking Tools: Storyboarding, Build, Measure, Learn, Feedback -

Problem identification in the context of the Design Thinking Framework - Design Thinking for Business Sustainability – Designing Product, Service – Design Thinking for Social Innovation - Minimum Viable Product

References

1.	Nigel Cross, Design Thinking, BERG Publishing, (2011).
2.	Thomas Lockwood, Design Thinking Integrating Innovation, Customer Experience and Brand Value, Design Management Institute (2009)
3.	S, Pallavi, “Management concepts in Thirukkural”, Mayas Publication, 1st Edition (2018)
4.	Velasquez, M. G., “Business ethics: Concepts and cases”, Pearson Education South Asia Pvt Ltd, 7th Edition (2018).
5.	A.C. Fernando, K P Muralidheeran and E K Satheesh, “Business Ethics: An Indian Perspective” Pearson Education, 3rd Edition (2019).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop a strong understanding of the Design Process and how it can be applied in a variety of business settings
CO2	To create physical prototypes / a visual representation of an idea
CO3	To conceive and articulate the Design Thinking approach
CO4	To apply design thinking concepts to their daily work and develop solutions based on Design Thinking

Course Code	:	MB731
Course Title	:	Human Resource Management
Type of Course	:	PC
Prerequisites	:	Nil
Contact Hours	:	30

Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand the core functions of human resource management and the key role and responsibilities of human resource managers
CLO2	To align HR policies and practices with organizational goals for sustainable competitive advantage, attract and retain high-performing employees
CLO3	To design and implement HR policies and practices that promote employee performance and well-being.
CLO4	To adapt with the emerging business needs and HR trends by aligning with organizational values and systems

Course Content

Introduction - Evolution, concept, and nature of HRM - Functions of Management - Personnel aspects of a HR Manager's Job - HR Matrix - The Changing Environment of HR Management.

HR Planning: integrated strategic planning, process of HR and control review mechanism, Job Analysis, Job Description and Job Specifications - Recruitment & Selection: objectives, steps, source of recruitment and selection, types and formats of interview, and factors affecting interviews - Latest technology adopted in Recruitment - Placement and Induction: Procedures, Tests, interviews, Placement & Induction issues.

Employee and Executive Training and Development - Essential ingredients of T &D - Training procedures - Methods and its steps of T&D - How to Lead the Change - Career Planning & Development - Planning and development counselling - Concept, significance, framework, functions - Traditional Versus Career Development Focus - Performance Appraisal: Concept, objectives, types, steps and Methods.

Job Evaluation: Concept, methods, advantages and disadvantages - Reward systems: Terminologies, role and types of Incentive Plans - Executive compensation issues - fringe benefits.

Introduction - objective - conditions for Healthy Industrial Relations - Trade unions: functions, role, future - Grievance procedure and Disciplinary procedures - Collective Bargaining.

References

1.	Gary Dessler and Biju Varkkey "Human resources Management" PHI, New Delhi, 17ed, (2023)
2.	K. Ashwathappa, Human resources and personal Management Text & Cases, TataMcGraw Hill & Co 3rd edn, (2002).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop skills to align HR policies with organizational goals, create an inclusive workplace culture, and stay updated with current HR trends.

CO2	To learn about pre-selection, HRD, evaluation, compensation, and industrial relations, and gain a comprehensive understanding of HRM.
CO3	To evaluate HRM related social, cultural, ethical and environmental responsibilities and issues in a global context
CO4	To develop an integrated perspective on role of HRM in modern business and to plan human resources and implement techniques of job design

Course Code	**:**	MB761
Course Title	**:**	Entrepreneurship Development
Type of Course	**:**	PC
Prerequisites	**:**	None
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To know the lifecycle of entrepreneurs, entrepreneurship and the preferred qualities
CLO2	To guide students to scan the environment, understand the legal and support systems required for starting a businesses
CLO3	To train them to assess their strengths and identify gaps that can help them create viable businesses

Course Content

Meaning and importance of entrepreneurship - Role of Entrepreneurs - Classifications of entrepreneurship - Indian Business climate - Entrepreneurial Mindset - Qualities of an Entrepreneur - Entrepreneurship Development Cycle.

New Business Idea Generation – Understanding customers and creating values - Phases of Venture creation - Recognizing Opportunities and Generating Ideas – Scanning Environment and Competition - Need for Creativity and Innovation, Entry strategies, Formulating Business Plan, Marketing plan, Organizational plan and financial plan - Relevant case studies.

Sources of Finance - Venture Capital - Angel Investment - Crowd Funding - Bootstrapping - Techno Economic Feasibility assessment - Break Even Analysis - Business Plan writing - Preparing Proposal (PPR and DPR) - Business model canvas.

Firm or Company registration, Types of Business firms - Compliances, Intellectual Property rights - Patents, Trademarks, Copyrights, Trade secrets - Business opportunities in the digital era - Relevant Case Studies. .

Startup Ecosystem - Elements of Unicorn and Decacorn - Incentives and Schemes for Startups - Incubator framework - Credit Guarantee Scheme for Startups - Central and State level Schemes and Support - Industrial Estates and Special Economic Zones in India - Development of Women Entrepreneurs.

References

1.	Vasant Desai, “The Dynamics of Entrepreneurial Development and Management”, 6th edition Himalaya Publishing House (2022)
2.	Katz , Jerome , “Entrepreneurial Small Business”, 7th Edition, Mc Graw Hill (2021).
3.	Robert D. Hisrich, Michael P Peters, and Dean A Shepherd, “Entrepreneurship” 10th edition, Mc Graw Hill (2016).

4.	Khanka. S.S., "Entrepreneurial Development" S.Chand and Co. Ltd., New Delhi, (2013).
5.	Scarborough, N. M., Cornwall, J. R., and Zimmerer, T. "Essentials of entrepreneurship and small business management", Pearson. (2016).
6	Donald F Kuratko, "Entrepreneurship - Theory, Process and Practice", 9th Edition, Cengage Learning, (2014).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To identify the essential qualities of entrepreneurship and formulate entrepreneurship development process
CO2	To describe the processes and procedures involved in setting up a venture
CO3	To analyze the scope and future of their business and develop a business idea
CO4	To develop an entrepreneurial mindset by nurturing their design skills, growth mindset and resiliency

Course Code	**:**	MB733
Course Title	**:**	Production and Operations Management
Type of Course	**:**	PC
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To introduce the students to the concepts of production & operations
CLO2	To enable students to understand the importance of management/ planning in the production & operations
CLO3	To develop the ability to identify problems relating to operations in a production environment

Course Content

Overview of Production & Operations Management and Supply Management. Introduction to Demand Forecasting – Qualitative Forecasting Techniques – Basic Quantitative Forecasting Techniques – Measures of Errors – Technology S-Curve & Forecasting

Plant location: Factors to be considered–Multi Plant Location–Evaluation of Factors using Rations plan & Cost Analysis–Plant location trends. Plant Layout: Types of Layout.

Introduction to Job Design – Motion Study. Job Evaluation – Job Evaluation Techniques. Work Measurement: Time Study–Work Sampling.

Introduction to Materials Management – Purchasing and Warehousing Functions – Vendor Development and Rating. Value Analysis

Introduction and Evolution of Quality Management, Inspection overview, objectives and scope; Quality control, Overview Total Quality management and its importance. Introduction to Six-Sigma.

References

1.	"Operations Management" by William J Stevenson, McGraw Hill Education, 13e Indian Edition (2022)
2.	"Operations Management: Theory and Practice" by B. Mahadevan, Pearson, Third Edition (2010)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To get an understanding of the "Operations" domain in management
CO2	To gain the skill to apply basic quantitative models for problems in business planning and operations
CO3	To analyse data and interpret the meaning of data
CO4	To prepare basic production reports

Course Code	**:**	MB734
Course Title	**:**	Financial Management
Type of Course	**:**	PC
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide students with an understanding of the basic concepts and principles of financial management.
CLO2	To develop students' ability to analyse financial data and make informed financial decisions.
CLO3	To introduce students to the tools and techniques used in financial management, including financial analysis, budgeting, and risk management.

Course Content

Financial management - Concepts - scope - Need - Time value of money – Valuation Concepts - Recent development in the domain of financial management.

Financial statement analysis - Break-even analysis - Employment of these concepts for managerial decisions.

Capital Budgeting - cost of capital concepts - capital structure - designing - capital structure - Capital structure theories. NI - NOI - MM approach – New Financial Instruments.

Financing decisions - operating, financial combined leverages - capital markets - term loan financing - other types like leasing, hire purchase - Dividend Theories and Policies.

Working capital management - planning - financing - inventory, cash, receivables management Inventory Management - Objectives and Techniques - Working Capital Financing - Definition and Mechanism - Designing Capital Structure - Different Aspects of Capital Structure - Capital Structure Practices in India.

References

1.	James C.Vanhorne . and John M.Wacho - wicz,Jr , Fundamentals of Financial Management Pearson Education, 13th edition (2008).
2.	I.M.Pandy , Financial Management, Vikas Publishing house,11th edition (2017).
3.	P. Chandra, Financial Management, 8th edition. Tata McGraw Hill, (2011).
4	W. Ross and Jordan, Fundamentals of Corporate Finance, Tata McGraw Hill, (2002).
5	M.Y.Khan and P.K.Jain, Financial Management - Text, problems and cases, Tata Mcgraw Hill, 5th edition (2007).
6	Rajiv Srivatsava.and Anil Misra, Financial Management, Oxford university press, 1st edition 2008, Fourth print (2009).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the basic concepts and principles of financial management.
CO2	To analyse financial statements and use break - even analysis to make managerial decisions.
CO3	To evaluate capital budgeting decisions and cost of capital concepts.
CO4	To design and analyse capital structure and understand capital structure theories, dividend theories
CO5	To Plan, finance, and manage working capital, including inventory, cash, and receivables management.

Course Code	**:**	MB735
Course Title	**:**	Business Research Methods
Type of Course	**:**	PC
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To equip students with the essential knowledge and skills necessary to conduct effective business research.
CLO2	The course will cover the fundamentals of research design, data collection, analysis, and interpretation.
CLO3	Students will understand the ethical considerations that underpin business research practice.

Course Content

Business Research Meaning, Significance and Process - Types of Research - Exploratory and Causal Research - Theoretical and Empirical Research - Cross Sectional and Time Series Research - Research Questions/Problems - Research Hypothesis.

Types of Research Design - Exploratory and Causal Research Design - Descriptive and Experimental Design - Validity of Findings - Internal and External Validity - Variables in Research

- Measurement and Scaling - Scales and Construction of Instruments - Validity and Reliability of Instruments.

Primary vs Secondary Data - Methods of Primary Data Collection - Construction of Questionnaire and Instrument - Types of Validity - Sampling Plan, Size - Determinants of Optimal Sample Size - Sampling Techniques - Sampling Methods.

Data Preparation - Coding - Data Entry - Validity of Data - Application of Bivariate and Multivariate Statistical Techniques - Factor Analysis - Discriminant Analysis - Cluster Analysis - Multiple Regression and Correlation - Conjoint Analysis.

Research report - Contents of Report - Need for Executive Summary - Contents of Chapter - Report Writing - Readability - Report Format - Ethics in Research - Subjectivity and Objectivity in Research - Reference format - Bibliography.

References

1.	William G. Zikmund, Barry J. Babin, Jon C Carr and Mitch Griffin, “Business Research Methods”, Cengage India, 9th Edition (2013).
2.	Naval Bajpai, “Business Research Methods”, Pearson, 2nd Edition (2017).
3.	H.K Dangi and Shruti Dewen, “Business Research Methods”, Cengage Learning, 1st Edition (2016).
4.	Donald R. Cooper, Pamela S. Schindler and J K Sharma, “Business Research Methods”, Tata Mc Graw Hill, 12th Edition (2018).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand research methods, tools and techniques.
CO2	To undertake a systematic outlook towards business situations for the purpose of objective decision - making and scientific inquiry to solve organizational problems.
CO3	To analyse data and interpret the meaning of data.
CO4	To prepare research reports.

Course Code	**:**	MB 741
Course Title		Strategic Management
Type of Course	**:**	PC
Prerequisites	**:**	NA
Contact Hours		30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To acquire familiarity with the concepts, process and frameworks of strategic management.
CLO2	To understand the significance of environment analysis and its real-time necessities
CLO3	To gain expertise in applying the strategic analysis techniques for identifying and executing appropriate strategic alternatives
CLO4	To equip with the knowledge on measures for strategic evaluation and control

Course Content

Strategy - Elements of Strategy - Strategic Management – Strategic Management Process - Hierarchy of Strategic Intent – Characteristics of Vision and Mission – Evaluation of vision and Mission statement

External environmental analysis – Industrial Organization view – Five-Forces Model - Internal environmental analysis - The Resources Based View - Value Chain Analysis, External and Internal Factor Evaluation matrix – Competitor Profile Matrix.

Corporate Level Strategies – Stability – Expansion - Retrenchment - Combination – Business Level Strategies – Cost leadership – Differentiation – Focus - Functional Strategies - Red Ocean and Blue Ocean Strategy.

Strategic Analysis – Strategy-Formulation Framework – Input Stage Techniques - Matching Stage Techniques – Decision Stage: Quantitative strategic planning matrix - Strategy Implementation – Structural, Behavioural, Functional and Operational Implementation

Strategy evaluation framework – Evaluation and Control Techniques - Balanced Scorecard Approach – Contingency Planning - Global challenges – Role of Organizational Systems in Evaluation

References

1.	Azhar Kazmi and Adela Kazmi, “Strategic Management”, McGraw-Hill Education, 5th edition (2020)
2.	Fred David, Forest David and Meredith David, “Strategic Management: A Competitive Advantage Approach, Concepts and Cases” Pearson, 17th edition, (2019).
3.	Michael A. Hitt, R. Duane Ireland, Robert E. Hoskisson, “Strategic Management: Competitiveness and Globalization: Concepts and Cases with MindTap”, Cengage Learning, 12th Edition (2022).
4.	Harvard Business Review, “HBR's 10 Must Reads on Strategy”, Harvard Business Press (2011).
5.	Thompson, Peteraf, Gamble, Strickland III, “Crafting and Executing Strategy: The Quest for Competitive Advantage: Concepts & Cases”, 22nd Edition (2021)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To demonstrate an understanding of the concepts, process and frameworks of strategic management.
CO2	To perform internal and external environment analysis for business cases
CO3	To apply the strategic analysis techniques for examining the business scenarios, choose and implement appropriate strategic alternatives
CO4	To equip with familiarity on strategic evaluation and control techniques

Course Code	**:**	MB742
Course Title		Summer Project
Type of Course	**:**	PC
Prerequisites	**:**	NA
Contact Hours		8 weeks

Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To gain industry-specific knowledge
CLO2	To provide exposure to contemporary problems faced by organizations
CLO3	To apply theoretical knowledge in practical settings

Course Content

Industry-specific project will be assigned which the students will complete in 8 weeks and submit a report on their project and learnings

References – Not applicable.

Course Outcomes (CO)

At the end of the course student will be able

CO1	To orient with specific industry and acquire management knowledge
CO2	To identify, analyze and interpret real time business problems
CO3	To gain hands on experience working with real time projects and contributing to industry

Course Code	:	MB751
Course Title	:	Project Management
Type of Course	:	PC
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To learn the fundamental principles and practices of managing projects.
CLO2	To enable students to plan, coordinate and control the complex and diverse activities of modern industrial and commercial projects.
CLO3	The course aims to provide students with a comprehensive understanding of project management techniques, and methodologies, including project scope, scheduling, and budgeting.

Course Content

Project Management - An overview - Project Systems Environment - Project System Lift Cycle.

Market Feasibility - Technical Feasibility - Financial Feasibility - Economic Feasibility - Financial Economic Appraisal of a project - Social Cost Benefit Analysis in India – Project.

PERT - GERT - LOB - GAN - Time Cost Trade - off and Crashing Procedure - Multi - Project Scheduling with limited resources.

Project Materials Management - Project Implementation Scheduling - Funds Planning - Performance - Budgeting and Control - Tendering and Contract Administration.

Project Management Information System - Value analysis in Project Management - Project

organization and Communication - Ecology and biodiversity issues - Environmental Impact assessment.

References

1.	Prasanna Chandra "PROJECTS: Planning Analysis Selection Financing Implementation and Review" 10 Ed.' Tata McGraw Hill, (2023).
2.	Lawrence J. Moore and Edward R. Clayton 'GERT Modeling and Simulation Fundamentals and Application', Petrocelli charter New York, (1997).
3.	Ahuja H.N 'Project Management' John Wiley and Sons New York, 2 Ed (2013).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To apply selection criteria and select an appropriate project from different options.
CO2	To write a work breakdown structure for a project and develop a schedule based on it.
CO3	To use learned techniques to determine & predict the status of the project.

Course Code	**:**	MB752
Course Title	**:**	Strategic Total Quality Management
Type of Course	**:**	PC
Prerequisites	**:**	None
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To make the students understand the TQM concepts and practices followed by various industries.
CLO2	To understand the strategic aspects of quality tools and techniques to enhance the productivity and TQM culture in an organization.
CLO3	This course exposes the students how various quality tools and techniques are used in product and service based industries.
CLO4	To instill the knowledge the on the Business excellence frameworks.
CLO5	To develop suitable Total Quality Management strategies for Indian companies.

Course Content

Principles and Concepts of Quality - Evolution of Quality Movement - Dimensions of Quality - The Deming Philosophy - Quality Management System - Quality Planning - Functional planning deployment from Strategic plans - Benefits of TQM.

Benchmarking - Quality Audits - Quality Costs - Supplier Evaluation - Continuous Process Improvements - Innovation Management.

Lean Management Principles - 3M (Muda, Mura and Muri) - Lean Management Tools and Techniques - 5S - Kaizen – JIT – Kanban – Heijunka - Total Productive Maintenance – Theory of Constraints

Six Sigma concepts - New Seven tools of Quality - Business Process Reengineering - Quality Function Deployment - Failure Mode and Effect Analysis.

Business Excellence Framework (EFQM - Deming - Malcolm Balridge Awards) - Indian Quality Awards and Case Studies - Human Resource Management in TQM environment.

References

1.	Dale H. Besterfield, Carol Besterfield, Glen H Besterfield and Mary Besterfield, Total Quality Management, 5th Edition, Pearson, New Delhi (2018)
2.	Poornima M.Charantimath, Total Quality management, 4th Edition, Pearson Education, New Delhi. (2022)
3.	Subburaj Ramasamy, Total Quality Management, Tata McGraw Hill, New Delhi.(2017)
4.	Janakiraman and Gopal Total Quality Management, PHI , New Delhi.(2006)
5.	Howard S Gitlow, Alan J Oppenheim, Rosa Oppenheim, and David M Levine, Quality Management, 3rd Edition , Tata McGraw Hill New Delhi (2017)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand of the crucial role of quality in business.
CO2	To able to recall the evolution of quality management and quality philosophies and practices.
CO3	To explain the need for strategic total quality management in the present business climate.
CO4	To understand the fundamental principles of Lean Manufacturing
CO5	To have exposure on Quality culture followed in world-class companies.

Course Code	MB761
Course Title	AI for Business Systems
Type of Course	PC
Prerequisites	None
Contact Hours	30
Course Assessment Methods	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To explain the core concepts of AI - Large Language Models (LLMs) from a managerial perspective and design structured, advanced prompts to solve specific business use cases.
CLO2	To analyze the transition from static chatbots to autonomous AI agents.
CLO3	To assess the deployment of AI solutions across core business verticals, including Finance, Marketing, and Human Resource and construct a comprehensive AI transformation roadmap for an organization

Course Content

Evolution of AI: AI vs ML vs Deep Learning vs Data Science -Types of AI: Narrow AI, General AI, Generative AI - Machine Learning Fundamentals - AI Project Lifecycle and Enterprise Readiness.

Foundations of Generative AI: Large Language Models (LLMs) and Transformer Architecture (Managerial Perspective) - Prompt Engineering Fundamentals: Zero-shot, Few-shot, Chain-of-Thought, and Role-based Prompting - Structured Prompt Design

Evolution from Chatbots to AI Agents: Agentic AI Concepts and Architecture (Perception, Planning, Reasoning, Tool Usage, Memory) – Multi-Agent Systems - Human-AI Collaboration Models - AI- Augmented Organizations

AI Applications: Algorithmic Trading - Fraud Detection Systems - Credit Scoring Models - AI in FP&A. Recommendation Systems - Programmatic Advertising, Social Media Analytics. AI-enabled Talent Acquisition - Skill Mapping - Workforce Analytics - Employee Attrition Prediction - Employee Experience Analytics.

AI Governance: Enterprise AI Governance Frameworks, AI Risk Management Framework (NIST), Responsible AI Principles, AI Audit Mechanisms - Develop an AI Transformation Roadmap for a selected organization.

References:

1.	Agrawal, A., Gans, J., & Goldfarb, A. (2018). *Prediction Machines: The Simple Economics of Artificial Intelligence*. Harvard Business Review Press.
2.	Iansiti, M., & Lakhani, K. R. (2020). *Competing in the Age of AI: Strategy and Leadership When Algorithms and Networks Run the World*. Harvard Business Review Press.
3.	Agrawal, A., Gans, J., & Goldfarb, A. (2022). *Power and Prediction: The Disruptive Economics of Artificial Intelligence*. Harvard Business Review Press.
4.	Daugherty, P. R., & Wilson, H. J. (2018). *Human + Machine: Reimagining Work in the Age of AI*. Harvard Business Review Press.
5.	Introduction to Large Language Models: https://www.linkedin.com/learning/introduction-to-large-language-models
6.	Agentic AI Fundamentals: https://www.linkedin.com/learning/agentic-ai-fundamentals-architectures-frameworks-and-applications
7.	Stanford Graduate School of Business – AI and Digital Transformation frameworks: https://grow.stanford.edu/ai-programs-at-stanford/
8.	Responsible AI Framework for Enterprise AI Products: https://www.linkedin.com/learning/responsible-ai-framework-for-your-enterprise-ai-product

Course Outcomes (CO)

At the end of the course student will be able to:

CO1	Evaluate organizational readiness for AI adoption.
CO2	Apply prompt engineering techniques to improve AI-assisted decision making.
CO3	Analyze AI applications across Finance, Marketing, HR
CO4	Design AI implementation roadmaps for business transformation

PROGRAMME ELECTIVES

Human Resource Management

Course Code	:	MB811
Course Title	:	Talent Management
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand the importance of Talent Management in Organizations
CLO2	To understand the key processes involved in attracting, retaining, developing, engaging employees
CLO3	To understand the different strategies and practices of Talent Management
CLO4	To develop knowledge on designing and implementing effective talent management practices

Course Content

Talent Management - Definition - Need and Importance - Focus Areas in Talent Management - Role of HR in talent management - Building Blocks of Talent Management Framework - Role and importance of Job Core Competencies - Talent Value Chain - Understand and explain creation of a Diversity initiative into the Talent management process.

Developing the building blocks of talent management - Key Processes - E Recruitment systems - Talent Management Model - Talent acquisition - Talent Identification and Business Alignment - Strategic Trends in Talent Acquisition.

Talent planning - Elements of Talent Planning - Performance Management Systems in organizations and their relationship between rewards to performance. Develop a Career Track Planning process - Succession Planning - Evaluating Internal and External Recruitment Strategies selection techniques - Talent Management Strategy.

Talent Engagement - Strategic Compensation plan for Talent Engagement - Talent Development: Coaching and Training - Managing Leadership Talent - Leadership Development relationship of the Compensation Plan - Talent Retention - Sustainable Talent Management and Reward Model.

HRIS systems and Talent Management System - Using information technology to support a TM system - Data Security and Reporting Essentials in a Talent Management System - Contemporary Talent Management Issues and Challenges - Outsourcing, Contingent, Contract/temporary workforce - Managing Global and Virtual Talent.

References

1.	Lance A. B. and Berger, D. R. “The Talent Management Handbook: Making Culture a Competitive Advantage by Acquiring, Identifying, Developing, and Promoting The Best People”, McGraw - Hill (2018).
2.	Gowri Joshi and Veena Vohra, “Talent Management”, Cengage Learning (2017).
3.	Hasan, M., Singh and A. K., Dhamija, “Talent management in India: Challenges and Opportunities”, Atlantic Publication (2017).
4.	Allan Schweyer, “Talent Management Systems: Best Practices in Technology Solutions for Recruitment, Retention and Workforce Planning”, Wiley (2010).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To explain the different processes involved in the Talent Management
CO2	To explain the strategies and practices involved in managing Talent
CO3	To understand and appreciate the interplay between different domains of Talent Management and their impact on the performance of the organization
CO4	To design and develop effective Talent Management practices that reflects the strategic goals of the organization

Course Code	**:**	MB812
Course Title	**:**	Training and Development
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide a sound foundation of the key concepts and the recent approaches to training and development.
CLO2	To enable students to assess, design, develop, and implement various methods and techniques of training.
CLO3	To help students to gain a strong practical focus to get a good blend of both theory and practice in designing training.

Course Content

Introduction to Instructional systems Design - Needs Analysis and Needs Assessment - Organizational strategies and Organizational Analysis - Performance Analysis - Job Analysis - Task Analysis - Learner Analysis - Context Analysis and Skill Gap Analysis.

Introduction to Training Design - Designing Training Objectives - Developing Training Deliverables and Instructional Strategies - Training Design Budgets and Schedules - Training Project Management - Design Blue Prints and Prototypes.

Introduction to Development - Development Process Model - Drafting Training Materials - Developing Tests/Assessments - Ensuring Validity and Reliability - Quality Control Issues and Full - scale Production.

Introduction to Implementation - Train the Trainer Programmes - Classroom Delivery of Training -

Training Discussion Process Model - Non - classroom Delivering Techniques - Instructional Design of Organizations.

Introduction to Training Evaluation - Role of Evaluation - Types of Evaluation Designs - Kirkpatrick Evaluation Model - Evaluating Trainee Reaction and Learning - Evaluating Transfer of Training - Evaluating Results of Training - past and future analysis.

References

1.	Donald J Ford, "Bottom Line Training: Performance - Based Results", Training Education Management LLC, 2nd edition, (2010).
2.	Raymond A. Noe and Amitabh Deo Kodwani, "Employee Training and Development", McGraw Hill Education, 9th Edition, (2022).
3.	Jon M. Werner and Randy L. DeSimone, "Human Resource Development", Cengage Learning, 6th edition, (2016).
4.	Dipak Kumar Bhattacharyya, "Training and Development: Theories and Applications", Sage Texts, (2015).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop knowledge about recent approaches to training and development in the organizations.
CO2	To critically analyze the training needs of an organization.
CO3	To design, develop, and execute comprehensive training programs using various methods and instructional strategies to meet organizational objectives.
CO4	To evaluate the value and effectiveness of training programs using appropriate assessment techniques and methodologies.

Course Code	**:**	MB813
Course Title	**:**	Interpersonal Effectiveness
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To learn about discovering oneself and understanding one's self.
CLO2	To apply the knowledge on interpersonal effectiveness for enhancing workplace relationship
CLO3	To comprehend on ethical dilemma in decision - making.
CLO4	To strive for self - development by means of personal well - being.

Course Content

Knowing Oneself - preferences - likes - dislikes and values - Managing oneself - Self efficacy - Self Esteem - Pillars of Self Esteem - Transaction analysis - Life script analysis - strokes

Personality assessment - Meyers Briggs Type Indicator - Enneagram - Emotions and Moods - Affective events theory - Emotional Intelligence - Locus of control - Time Management – Stress Management - 4 A's of managing stress

Interpersonal relations - Managing workplace relationship - Fundamental interpersonal relations orientation analysis - Johari window analysis - Constructive feedback - Adaptability quotient - Persuasion Strategies and Tactics

Ethical dilemma and moral dilemma - Fair and just approach in decision making – Enhancing ethical behavior, Conflict management process - resolving interpersonal conflict

Personal development - Process – Steps, Resilience - Theory and Practice, Personal Wellbeing - Eudemonic and Hedonic, Power of self-talk - Spirituality and well - being.

References

1.	Andrew J DuBrin, “Human Relations - Interpersonal Job Oriented Skills” Pearson Education, 12e (2019).
2.	HBR's 10 Must Reads on “Managing People” (2016).
3.	Lakshmi Ramarajan, “Building Effective Working relationships”. Harvard Business School Module Note. (Revised January 2015).
4.	David H. Johnson. “Reaching Out: Interpersonal Effectiveness and Self - Actualization”, Pearson Education, 11e, (2012).
5.	Robert N. Lussier. “Human Relations in Organizations: Applications and Skill Building” McGraw Hill, 12e (2021).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To demonstrate self-awareness and apply self - development techniques to resolve self- and interpersonal challenges
CO2	To demonstrate effective interpersonal/workplace relationship.
CO3	To comprehend the necessities of fair and just approach in decision making
CO4	To understand the significance of well -being for personal growth

Course Code	**:**	MB814
Course Title	**:**	Compensation and Benefits
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand the different compensation elements and the techniques for deciding on these elements.
CLO2	To explore the legal and ethical issues in employee and executive compensation.
CLO3	To analyze different types of reward procedures for employees on the basis of performance.
CLO4	To examine the compensation and benefits practices that contribute to attracting and retaining high - quality employees.
CLO5	To evaluate a compensation system's contribution to an organization's effectiveness and identify opportunities for improvement of those systems.

Course Content

Conceptual and theoretical understanding of economic theory related to Compensation - Management (Wage Concepts and Wage Theories) - Employee's satisfaction and Motivation issues in compensation design - Establishing Internal, External and Individual equally.

Strategic importance of variable pay - Determination of Inter and Intra industry compensation differentials and elements of good wage plans - Individual and Group Incentives - Introduction to Institutional Mechanisms for Wage Determination.

Dearness Allowance Concept - Emergence & Growth in India - The role of fringe benefits in reward systems Retirement Plans including VRS/Golden Handshake Schemes.

Introduction to Executive Compensation and benefits programmes - Compensation Systems in Multinational Companies and IT companies including ESOP.

Collective Bargaining Strategies - Long term settlements - Cases of Productivity Settlements - Exercises on drawing up 12 (3) and 18(1) settlements - Emerging Trends in IR due to LPG.

References

1.	Milkovich and Newman, "Compensation: Special Indian Edition", McGraw Hill, 9th edition, (2017).
2.	Dipak Kumar Bhattacharya, "Compensation Management", Oxford University Press, 2nd edition, (2014).
3.	Fisher, Schoenfeldt and Shaw, "Human Resource Management", Sixth Edition, Boston, MA: Houghton - Mifflin, (2006).
4.	Joseph J. Martocchio, "Strategic Compensation: A Human Resource Management Approach", Pearson Education, 9th edition, (2017).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To analyse, integrate and apply the knowledge to solve compensation - related problems in an organization.
CO2	To recognize how pay decisions help the organization achieve a competitive advantage.
CO3	To evaluate how organizations are approaching the vital tasks of managing rewards and developing the capabilities of their people.
CO4	To understand the legal issues on employee compensation and settlements of employees and to know the some similarities and differences between financial and non - financial benefits for the employees.

Course Code	**:**	MB815
Course Title	**:**	Counselling in the Workplace
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To introduce the concept of counselling and its significance in the workplace
CLO2	To provide knowledge on roles and responsibilities of counsellors in the workplace.
CLO3	To equip students with the methods necessary to effectively assess - contract and engage in counselling with employees.

Course Content

Counselling - History of counselling - Dimensions of counselling - Basics of workplace counselling - Orientation models - Brief therapy models - Problem focused models - Work oriented models - Manager - based models - Externally based models - Internally based models - and welfare - based models - organization change models - Diversity, Equity, and Inclusion in Workplace Counselling.

Multiple roles of counsellors - Counselling Values Vs business values - Training for counsellors - Ethical issues in counselling - Stress and counselling - Impact of organizations - Systematic approaches - Organization culture: different cultures and counselling.

Preparation for counselling - Assessing workplace counselling - Contracting for counselling - Introducing counselling in the workplace - Referring and engaging in counselling - and terminating counselling.

Usefulness of evaluation - Record keeping - Evaluation: Formative and summative evaluation - Different methods of counselling evaluation - Training in ethical decision making - Ethical responsibilities: clients and organizations - Ethical Responsibilities of Employee Counsellor.

Rational Emotive Behavior Therapy - Methods of training counsellors - Dynamics of training - The training team - Facilities - Context - Assessment - Learning community - Supervision - Supervisory relationships - Supervision for counsellors' parallel process in workplace counselling - Helping counsellors for supervision.

References

1.	Kavita Singh "Counselling Skills for Managers", Prentice Hall India, (2015).
2.	Alistair McBeath, Sofie Bager Charleson, "Enjoying Research in Counselling and Psychotherapy: Qualitative, Quantitative and Mixed Methods Research", Springer International Publishing (2020).
3.	Richard Welson Jones "Introduction to Counselling skills - Texts and Activities" - Sage Publications Ltd. 4th Edition - (2000).
4.	Adrian Coles "Counselling in the Workplace", McGraw Hill Education, (2003).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the benefits and challenges of workplace counselling and its impact on employee well - being.
CO2	To identify different counselling models and their relevance to the workplace and evaluate their effectiveness.
CO3	To demonstrate effective counselling skills - including assessment - contracting - and termination of counselling sessions

Course Code	:	MB816
Course Title	:	Change Management
Type of Course	:	PE
Prerequisites	:	NIL
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand the role of HR strategies in implementing change within an organization.
CLO2	To encourage the learners whether the change as an opportunity for self-motivation and innovation.
CLO3	To prepare students with managerial and leadership challenges while dealing with organisational change.
CLO4	To analyse the impact of structural choice and change on an organization's HR policies and practices

Course Content

Strategy - change and HR strategies - implementation and impact of change - role of HR strategies in implementing change - Structure and strategic change - HR implications of structural choice and change - Managing Resistance to Change.

Organisational Culture - realigning culture - procedure for realignment - Technology and change management - Recruitment and selection - definitions and models - contributions to organisational change - emergence of alternative process.

Performance Management - Old and new views - contributions to Organizational change - HRD - Vital component of HR change strategies - contributions to organisational change and integrating framework - Globalization and change in organizational culture.

Leadership and change management - Strategic Reward Management - changing Behaviours - Reward Management - values - structure - processes - Employee Relations - changing the focus - change through employee involvement.

Downsizing - Implications - alternative strategies - methods of implementation - survivor management - Evaluating and promoting change - Approaches to evaluation - Evaluation to promotion - Analysis and feedback procedures - Contemporary challenges in change management.

References

1.	Camal C.A., “Managing Change in Organisations”, Prentice Hall, London, (1995).
2.	Dipak Kumar Bhattacharyya, “Organizational change and Development”, Oxford University Press, (2011).
3.	Robert A Paton and James McCalman, “Change Management: A Guide to Effective Implementation”, SAGE publication, 3rd edition, (2008).
4.	Mike Green, “Change Management Master Class: a step - by - step guide to successful change management”, (2007).
5.	Kavita Singh, “Organizational Change and Development”, Excel Books, (2005).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop an understanding of the importance of HR strategies in implementing change and managing HR policies and practices.
CO2	To Understand the process of sustaining change and how to embed a change initiative as the new business as usual.
CO3	To explain how organization can change business process to deal with business challenges.
CO4	To demonstrate an understanding of how organizations can be made more effective and dynamic by improving the Business Process and structure

Course Code	**:**	MB817
Course Title	**:**	Strategic Human Resource Management
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide an understanding of the origin and evolution of Strategic Human Resource Development (SHRD) and its relevance in today's business environment.
CLO2	To enable students to analyse the strategic responses of organizations and their impact on SHRD practices and systems
CLO3	To equip students with the knowledge and skills to develop and implement effective SHRD strategies that align with organizational Objectives.

Course Content

Introduction - Changing Environment - Business Complexities - Portfolio - process and structure related strategic responses

Significance of HRD - HRD and complexities advantage - Business Strategy and HRD Business Policy and HRD - Life Cycle of organizations and HRD - Organizational Performance and HRD - Employee Well - being and SHRD - Sustainable HRM as a HRD practice.

Practices: SHRD fundamentals - SHRD initiatives - working conditions and family welfare - Training - PA - Job Enrichment - Career planning - communication - empowerment. Facilitators: Concerns of Management - concerns of Trade unions - Concerns of Frontier Officers / Supervisors - concerns of workers - IR Scenario - Trainability - Outsourcing.

Portfolio related strategic responses and Strategic HRD system - Process related strategic responses and Strategic HRD system and Structure related strategic responses and Strategic HRD system.

Profile of study organization - strategic responses of study organizations - Strategic HRD system in study organizations - relationship between practices and facilitator - alignment between responses and Strategic HRD systems - blocks of alignment and their solutions.

References

1.	Srinivas R Kaudula, “Strategic Human Resource Development”, PHI (2012).
2.	Rothwell, William J., and H. C. Kazanas. “The strategic development of talent”. Human Resource Development Press (2003).
3.	Gupta Das Ananda, ‘Strategic Human Resource Management”, Routledge, (2020).
4.	Jim and Grieves, “Strategic Human Resource Development”, SAGE Publications Ltd. (2003).
5.	John Walton, “Strategic Human Resource Development”, Prentice Hall, New Delhi, (1999).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To demonstrate a clear understanding of the evolution and significance of SHRD and its role in enhancing organizational performance.
CO2	To analyse the strategic responses of organizations and develop SHRD strategies that align with organizational objectives.
CO3	To design, implement and evaluate SHRD practices that facilitate the development and growth of employees while contributing to organizational success

Course Code	**:**	MB818
Course Title	**:**	Negotiation and Conflict Management
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand the concepts and principles of negotiation and conflict management in the workplace
CLO2	To develop negotiation and conflict management skills that are essential for effective communication and problem - solving in the workplace
CLO3	To analyse and evaluate negotiation and conflict management strategies and techniques in varied contexts and apply to the real - world cases

Course Content

Definition and concepts of negotiation - Approaches - Negotiator’s dilemma - Conflict management - Types - Process - Skills required for effective negotiation - Facets of Personality that affects negotiation and Conflict resolution.

Distributive and integrative bargaining strategies - Preparation and planning for negotiation - Techniques for effective communication and active listening - managing emotions and building rapport during negotiation.

Listening to Hear and Speaking to be Listened To - Alternative dispute resolution techniques - Understanding mediation and its benefits - Process of mediation and mediator's role - Techniques for effective conflict resolution and mediation.

Role of culture and power - Negotiation in global context - Cross - cultural negotiation challenges

and strategies - Negotiation in virtual and online environments - Negotiation with reference to specific industries.

Ethical challenges in handling conflicts and negotiation - Multi - party negotiations and coalitions - Negotiating through impasse and difficult situations - Future of negotiation and conflict management.

References

1.	Susan S. Raines, "Conflict Management for Managers: Resolving Workplace, Client, and Policy Disputes", Rowman and Littlefield, (2019)
2.	Corvette Budjac A Barbara, "Conflict Management: A Practical Guide to Developing Negotiation Strategies", Pearson Education Inc, (2007).
3.	Tim Castle, "The Art of Negotiation: How to get what you want (every time)", Known Publishing (2018)
4.	Deepak Malhotra "Negotiating the Impossible: How to Break Deadlocks and Resolve Ugly Conflicts (without Money or Muscle)", ReadHowYouWant, (2016).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To comprehend the vitality of negotiation skills and approaches for conflict management.
CO2	To understand the significance of individual differences, cross - cultural differences in negotiation and conflict handling.
CO3	To evaluate various negotiation strategies and techniques and apply the strategies techniques to resolve the conflict of interests.

Course Code	**:**	MB819
Course Title	**:**	Industrial Psychology
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide an overview of the principles, practices, and challenges associated with psychology in everyday life and in the workplace
CLO2	To understand the development of human resources, including employee selection principles and techniques, job analysis, and psychological testing.
CLO3	To explore the field of organizational psychology, including leadership, motivation, job satisfaction, and organizational culture
CLO4	To analyse the characteristics of the workforce, including physical working conditions, work schedules, safety and health, and stress management
CLO5	To examine consumer psychology, including the scope, research methods, advertising, and consumer behavior and motivation.

Course Content

Psychology on the job - everyday life - an overview of the development - challenges - careers - practical problems - areas - Techniques - tools - and techniques - study research methods experimental - naturalistic methods - survey and public opinion - virtual laboratories - Ethical issues in organizational psychology

Employee selection principles and techniques - the recruitment process - fair employment practices - job and work analysis - interviews - assessment centres - Psychological testing - characteristics - overview of testing program - types of psychological tests - what do tests measure - problems with using psychological tests - Diversity and inclusion in the workplace

Leadership - motivation - job satisfaction - and job involvement - content and process theories of motivation - the quality of work life - the organisation of the organisations - TQM - organisational change - socialisation - culture - informal groups - Artificial Intelligence and organizational psychology.

Physical working conditions - work schedules - psychological and social issues - engineering psychology - employee safety and health - stress in the workplace - causes - sources - stress management.

Scope - research methods - nature and scope of advertising - consumer behaviour and motivation - Employee as a consumer in the changing workplace.

References

1.	Duane P. Schultz and Sydney Ellen Schultz "Psychology and Work Today - An introduction to Industrial and Organizational Psychology" - McMillan Publishing Company, (2009)
2.	Neil Anderson, Deniz S Ones, Handan Kepir Sinangil and Chockalingam Viswesvaran. Handbook of Industrial, Work and Organizational Psychology SAGE Publications (2003).
3.	David A. Kolb, Irwin M. Rubin, Jamer M. Mc Intyre Organizational Psychology: An experimental approach - Third edition (1979).
4.	Ramanuj Majumdar "Consumer Behaviour: Insights from Indian Market" PHI, (2009).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop an understanding of the principles and practices of psychology and their application in the workplace and everyday life
CO2	To evaluate the development of human resources - including recruitment practices - job analysis - and psychological testing
CO3	To analyse the role of leadership - motivation - job satisfaction - and organizational culture in organizational psychology.
CO4	To assess the impact of physical working conditions - work schedules - safety and health - and stress management on the workforce.

Course Code	**:**	MB820
Course Title	**:**	Human Resource Analytics
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide the knowledge on human resource analytics frameworks and its application.
CLO2	To equip students with the knowledge on the significance of alignment between human resource process and organization process.
CLO3	To acquire familiarity with various human resource metrics and preparation of human resource scorecard.
CLO4	To apply the analytical approaches for identifying the business contributions of HR function in the organizations.

Course Content

Human Resource (HR) management in changing context - Transition from transaction orientation to analytics orientation - Persuasive HR function - Role of analytics in HR - HR Analytic - Framework - People Capability Maturity Model - LAMP framework - HCM 21 framework - Talent analytics framework

Alignment Analytics - Linking HR process and organization process - Identify alignment opportunities - Stakeholder Alignment - HR Alignment Inventory - Workforce Planning - Measurement Map - Lead and Lag indicators - Business Impact - Human Capital Strategy.

Formulation of key performance indicators and key result areas - HR Metrics - Recruitment metrics - HR development metrics - Talent retention metrics - HR cost benefit metrics - Performance metrics - Diversity Metrics - Engagement metrics - Safety and health metrics - Human capital ROI - HR Scorecard - HR Audits

Descriptive Analytics - Exploring the people data - Slice and dice of data - Cohort analysis - HR Dashboards - Segmentation - Business Insights - Key Performance Indicator Catalogue Creation.

Predicting employee performance - Predicting employee turnover - Techniques to capture the fallouts of HR Practices - Impact of interventions - Evidence based human resource management - Organization change and improvement - Ethical standards.

References

1	Dipak Kumar Bhattacharyya, HR Analytics: Understanding Theories and Applications, Wiley, 2nd edition (2023)
2.	Pratyush Banerjee, Manish Gupta and Jatin Pandey, “Practical Applications of HR Analytics”, Sage Publications, 1st edition (2019).
3.	Martin Edwards and Kirsten Edwards, “Predictive HR Analytics: Mastering the HR Metric”, Kogan Page, 2nd edition (2019).
4.	Bassi, Laurie Jo, Rob Carpenter, and Dan McMurrer, “HR analytics handbook”, Reed Business. (2012).
5.	Fitz - Enz, Jac, “The New HR Analytic. Predicting the Economic Value of Your Company’s Human Capital Investments”. American Management Association (2010).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To demonstrate knowledge on various human resource analytics frameworks and apply the frameworks for real - world business scenarios.
CO2	To understand the alignment between human resource process and organization process and emphasize the significance the alignment analytics

CO3	To apply the knowledge on various human resource metrics and design/implement human resource scorecard for measuring performance
CO4	To equip with hands - on knowledge on application of analytical approaches for examining the contributions of HR function for organization change.

Course Code	**:**	MB821
Course Title	**:**	Industrial Relations and Labour Laws
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To create an understanding of the concepts of industrial relations and their impact on stakeholders, including employees, employers, and government.
CLO2	To know that the global competition often results in the casualization of labour.
CLO3	To understand labour legislation introduction and legal provisions for factory workers, wages and Bonus
CLO4	To evaluate the significance of industrial relations legislation in India.

Course Content

Industrial relations - An Overview - Perspectives/Approaches to IR - Major stakeholders of IR - Impact of globalization on IR

Labour Welfare and Social Security - welfare officer in Indian Industry - Training of welfare officers; Aims of social security measures - Labour Legislations and ILO.

Normative Labour Legislations - Factories Act - 1948 - Bombay shop and Establishment Act 1948 - The Apprenticeship Act – 1961 - Contract Labour (Regulation and Abolition) Act - 1970 - Wage Legislation - Minimum Wages Act 1948 - Payment of wages Act 1936 - Payment of Bonus Act1965.

Industrial Relations Legislations - Trade Union Act 1926 - Industrial Employment standing order Act 1946 - Industrial Dispute Act 1947.

Social Security Legislations - Workmen's compensation Act - Employees state Insurance Act 1948 - Provident Fund Act 1952 - Payment of Gratuity Act 1972 - The Trade Unions Act - 1926 - The Maternity Benefit Act 1961 - Functions and Working of Offices Attached to Labour Ministry - Directorate - General of Employment and Training; Labour Bureau; Welfare Commissioners - Various committee constitute by the Government of India (Ministry of Labour).

References

1.	A.M. Sarma, "Industrial Jurisprudence and Labour Legislation", Himalaya Publishing House, 8th revised edition, (2017).
2.	N. D. Kapoor, "Handbook of Industrial Law", S. Chand and Sons, 14th Edition, (2013).
3.	Mamoria C.B., "Dynamics of Industrial Relations", Himalaya Publishing House, 16th edition, (2018).
4.	P.L Malik, "Handbook of Labour and Industrial Law", EBC publishing, 18th edition, (2018).
5.	Venkata Ratnam C. S., "Industrial Relations", Oxford University Press, (2006).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To resolve industrial relations and human relations problems and promote the welfare of industrial labour.
CO2	To analyze the impact of globalization on industrial relations and its effects on employment practices and labour laws.
CO3	To explain the key features of labour legislation in India, and industrial relations legislation, and its implications.
CO4	To evaluate the significance of social security legislation, various benefits acts, and their impact on employees and employers

Course Code	**:**	MB822
Course Title	**:**	International Human Resource Management
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide students with an understanding of the factors differentiating the domestic human resource management from international HRM (IHRM).
CLO2	To explore the challenges and opportunities associated with human resource practices in global context
CLO3	To enable students to develop a critical perspective on international HRM issues and trends, and to apply this knowledge in practice.
CLO4	To develop knowledge on international industrial relations

Course Content

Defining International HRM - Differences between Domestic and International HRM - Strategic View of IHRM - Changing Context of IHRM - Cultural Context of IHRM - Organizational Context - Standardization and Localization of HRM Practices.

Sourcing Human Resources for Global Markets - Recruitment and Selection - Approaches to Staffing - Transferring Staff for International Business Activities - The Roles of an Expatriate, Nonexpatriate, Inpatriates - Expatriate Failure and Success - Expatriate Selection Processes and Dual Career Couples - Staffing in Cross - Border Mergers and Acquisitions.

International Training and Development - Components of Effective Pre - Departure Training Programs - the Effectiveness of Pre - Departure Training, Trends in International Training and Development - Re - Entry and Career Issues - Repatriation Process - Multinational Performance Management - Performance Appraisal of International Employees.

International Compensation - Key Components of an International Compensation Program for Expatriates, Approaches to International Compensation of Expatriates and Tentative Conclusions: Patterns in Complexity, Challenges and Choices.

Global Institutional Context - Key Issues in International Industrial Relations - Trade Unions and

International Industrial Relations - Regional Integration - IHRM Trends and Future Challenges - Ethics and Social Responsibility in International HRM.

References

1.	Aswathappa, K. and Dash S., "International human resource management" McGraw Hill, New Delhi, (2020)
2.	Berat Cicek and Mehmet Ali Turkmenoglu Contemporary Global Issues in Human Resource Management, Emerald Publishing, (2020)
3.	Daniel Wintersberger, "International Human Resource Management A Case Study Approach", Kogan Publishing, (2017).
4.	Dowling P., "International Human Resource Management: Managing people in a multinational context". Cengage Learning, (2013).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the differences between domestic and international HRM and apply this knowledge in the development of effective IHRM strategies.
CO2	To design and implement human resource management practices for global context.
CO3	To critically evaluate and apply the knowledge on international industrial relations.

Course Code	**:**	MB823
Course Title	**:**	Knowledge Management and Innovation
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand the concepts of knowledge management and innovation.
CLO2	To comprehend the strategic alignment between knowledge management and innovation.
CLO3	To make the students understand how knowledge is managed in organizations through framework of people, process and technology
CLO4	To design and implement a knowledge management program for effective knowledge sharing and innovation

Course Content

Knowledge society - from data to information to knowledge - Drivers of knowledge management - Intellectual capital - KM and learning organizations - Innovation - types and levels - case studies. Knowledge Management in Virtual Teams.

Strategic alignment - creating awareness - articulation - Evaluation and strategic alignment - Agile strategic alignment. Infrastructural development and deployment - Leadership, measurement, and refinement - Role of CKO, Organizational Learning

Analyzing business environment - knowledge audit and analysis - designing KM team - creating KM system blueprint - implementation through tactical approaches (Portal and Community of

Practice) - capture - store and sharing - metrics and evaluation

Technology components - Intranet and Groupware solutions - tools for collaborative intelligence - Portal technologies and implementation - web 2.0 - Integrating social media - package choices - knowledge security - Artificial Intelligence and Knowledge Management. Data analytics and knowledge management

Managing effective knowledge sharing - rewards and recognitions - change management - creating knowledge sharing culture - continuous improvement - KM led Innovation - case studies. Design thinking for knowledge management and innovation

References

1.	Aswathappa, K. and Dash S., "International human resource management" McGraw Hill, New Delhi, (2020)
1.	Jennex, Eugene Murray, "Knowledge Management, Innovation, and Entrepreneurship in Changing World", IGI Global, (2020).
2.	Morabito Joseph, Sack Ira and Bhate Anilkumar, "Designing Knowledge Organizations, A Pathway to Innovation Leadership", John Wiley and Sons, Inc, (2018).
3.	Fernandez, Gonzalez and Sabherwal, Knowledge Management, Pearson Publications, (2007).
4.	Madan Mohan Rao, Knowledge Management Tools and Techniques, Elsevier Inc, (2007).
5.	Peter Drucker, HBR on Knowledge Management, Harvard University Press, (1995).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the drivers of knowledge management and the different levels of innovation.
CO2	To identify the strategic alignment between knowledge management and innovation and develop an implementation plan for a knowledge management program.
CO3	To analyse the business environment, design a KM team, and develop a KM system blueprint for capturing, storing, and sharing knowledge

Course Code	**:**	MB824
Course Title	**:**	Managing HR in the Digital Age
Type of Course	**:**	PE
Prerequisites	**:**	None
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand how Digital HR Transformation impacts HR functions and practices, explore the applications of emerging technologies in HR, and assess the ethical and social implications of digital HR.
CLO2	To identify and implement strategies for navigating digital HR challenges, applying effective interventions, and promoting a culture of continuous learning and adaptability within organizations.
CLO3	To develop strategies at both individual and organizational levels to manage psychological, physical, and social well-being, ensuring employee well-being throughout the digital transformation in HR.

Course Content

Introduction to Digital Transformation in HR- Definition and scope of digital transformation - The evolution of HR technology - Enablers of digital transformation in HR.- Challenges and Opportunities of the Digitalization of HRM- The role of HR in leading digital change.

Emerging Technologies and trends in Digital HR - Overview of key technologies – SMAC, AI and machine learning in HR - Applications of AI in recruitment, performance management, and employee engagement- Big data analytics for informed decision-making in HR- Ethical considerations and challenges.

Implications of Digital HR - Benefits - Potential downsides - Job displacement, privacy concerns, and data security - The impact of automation on employee morale and job satisfaction - Social consequences of Digital HR on organizational culture and employee relationships.

Interventions for Effective Management - Designing flexible and adaptable work environments - Continuous learning and upskilling for future-readiness - Promoting a culture of innovation and agility - Interventions to manage the ethical and social impacts of digital HR - Strategies for ensuring data privacy and security.

Introduction to wellbeing and Digital HR - Psychological, Physical, and Social Digital Well-being - Strategies – Balancing technological advancements with employee well-being - Creating a collaborative and inclusive work environment.

References

1.	Mondal, S. R., Di Virgilio, F., & Das, S. (Eds.). HR Analytics and Digital HR Practices: Digitalization Post COVID-19. Springer Nature (2021).
2.	Waddill, D. D. Digital HR: A guide to technology-enabled human resources. Society For Human Resource Management (2018).
3.	Manuti, A., de Palma, P. Digital HR: A Critical Management Approach to the Digitalization of Organizations. SSRU Journal of Management Science, 5(2) (2018).
4.	Pandey, A., Balusamy, B., & Chilamkurti, N. (Eds.). Disruptive artificial intelligence and sustainable human resource management: Impacts and innovations-The future of HR. CRC Press (2023).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the impact of digital transformation on HR practices and functions and identify emerging technologies to enhance HR processes
CO2	To assess and manage the consequences of digital HR effectively and develop strategies for navigating digital HR challenges
CO3	To lead organizational change and foster a culture of continuous learning and adaptability within the organization
CO4	To implement strategies at both individual and organizational levels to manage psychological, physical, and social well-being throughout the digital transformation

Marketing Management

Course Code	:	MB831
Course Title	:	Strategic Brand Management
Type of Course	:	PE
Prerequisites	:	NIL
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To know the role and responsibility of the product and brand manager.
CLO2	Understand the key concepts in Product and Brand Management.
CLO3	To learn about the various brand elements.
CLO4	To explore various branding strategies.

Course Content

Meaning and Types Product - Role of a Product Manager - Responsibilities of a Product/Brand Manager - Product mix decisions.

Basic understanding of brands - significance of a brand - Branding impact on buyers - Brand Image building - Brand Identity - Brand Associations - Brand personality - Brand loyalty - Brand influencers.

Crafting of Brand Elements - Creating competitive advantage - Product/Brand - Differentiation strategies - Brand Positioning strategies - Branding in the Digital environment.

Branding Strategies - Brand Portfolio management - Product line and Brand Extension - Role of Brand ambassadors/Celebrities in Brand Building - Private Labels - Brand Rejuvenation - Sustainable Branding.

Creating, managing and measuring Brand Equity - Building Brand Experience - Integrating Marketing Communication to build brand equity - Managing Service Brands - Relevant case studies.

References

1.	Harsh V Verma, Brand Management, Excel Books, Second Edition, New Delhi, (2012)
2.	Kevin Lane Keller, “Strategic Brand Management”, Pearson Education, New Delhi, (2019).
3.	S.Ramesh Kumar, “Managing Indian Brands”, Vikas Publishing House, Second Edition, New Delhi, (2003).
4.	Kapferer, J.N. The New Strategic Brand Management: Advanced Insights and Strategic Thinking. 5th Ed. Kogan Page, (2012).
5.	Subrato Sengupta, Brand Positioning, Tata McGraw Hill, 2nd edition, (2004)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To choose and design the brand elements for the new product and services.
CO2	To Differentiate and position the brand in the consumer mind.
CO3	To apply the brand equity models.
CO4	To Craft the integrated marketing communication.

Course Code	:	MB832
Course Title	:	Retail Management
Type of Course	:	PE
Prerequisites	:	NIL
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	The course aims to introduce the participants to the organized retail industry and to provide them with an overview of the retail environment and the real - life exposure with case studies from international retailers.
CLO2	The course enables students to learn the retail and supply chain strategies.
CLO3	The course will teach store management and visual merchandising practices for effective retailing

Course Content

Definition - functions of retailing - types of retailing - forms of retailing based on ownership. Retail theories - Wheel of Retailing - Retail life cycle. Retailing in India - Influencing factors - present Indian retail scenario. Retailing from the International perspective.

Buying decision process and its implication to retailing - influence of group and individual factors. Customer shopping behaviour Customer service satisfaction. Retail planning process - Factors to consider - Preparing a complete business plan - implementation – risk analysis.

Choice of Store location - Influencing - Factors Market area analysis - Trade area analysis - Rating Plan method - Site evaluation. Retail Operations: Store Layout and visual merchandising - Store designing - space planning. Retail Operations: Inventory management - Merchandise Management - Category Management.

An Introduction. Retail marketing mix: Product - Decisions related to selection of goods (Merchandise Management revisited) - Decisions related to delivery of service. Retail marketing mix: Pricing - Influencing factors - approaches to pricing - price sensitivity - Value pricing - Markdown pricing. Retail marketing mix: Place - Supply channel – SCM principles - Retail logistics - computerized replenishment system - corporate replenishment policies. Retail marketing mix: Promotion - Setting Objectives - communication effects - promotional mix. Human Resource Management in Retailing - Manpower planning -recruitment and training - compensation - performance appraisal.

The impact of Information Technology in retailing - Integrated systems and networking – EDI - Bar coding - Electronic article surveillance - Electronic shelf labels - customer database management system. Legal aspects in retailing. Social issues in retailing. Ethical issues in retailing.

References

1.	Michael Levy Barton A Weitz and Ajay Pandit “Retailing Management” 6th edition McGraw Hill publishing house (2008).
2.	Swapna Pradhan “Retail Merchandising” McGraw Gill Publishing house (2010).
3.	Barry Bermans and Joel Evans “Retail Management A Strategic Approach” 8th edition PHI private limited New Delhi (2002).
4.	A.J.Lamba “The Art of Retailing” 1st edition Tata McGrawHill, New Delhi (2003).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop retail strategies considering the real - life retail environment.
CO2	To evaluate the service problems and provide prepare insights to solve the issues.
CO3	To create retail and supply chain strategies.

Course Code	**:**	MB833
Course Title	**:**	Consumer Behaviour
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand the factors influencing the consumer behaviour.
CLO2	To learn about the digital consumers trends.
CLO3	To explore the consumer decision making models.
CLO4	To capture the consumer insights to frame effective marketing strategies.

Course Content

Concept of Consumer Behaviour - Need and Importance - Inter disciplinary approach - Buying roles and Motives - Characteristics of Indian Consumer - Challenges in consumer behaviour.

Foundation of Individual Behaviour - Psychological factors: Perception - Consumer learning - Attitudes - Motivation and Personality - Digital Consumer - Online purchase decision.

Culture and Consumer Behaviour - Role of Family - References group: Role of Celebrities - Opinion leader - Digital influencers.

Consumer Decision Making - Major models of consumer behaviour - Consumer involvement - Purchase and Post Purchase Processes - Organizational Consumer Behaviour.

Consumerism - Consumer protection act - Diffusion of Innovation - Value creation to consumer - Managing Dissonance - Relevant Case Studies and application exercises.

References

1.	Kanuk L Schiffman and Ramesh Kumar.S, Consumer Behaviour, Prentice Hall, New Delhi, Eleventh edition, (2017).
2.	Hawkins Del I., Roger J. Best and Kenneth A. Coney, Consumer Behaviour, Tata McGraw Hill, New Delhi, (2001).
3.	Kumar S. Ramesh. Consumer Behaviour: The Indian Context, Pearson Education India, (2017).
4.	Batra Satish K. and S. H. H. Kazmi. Consumer Behaviour, Excel Books India, (2014).
5.	Majumdar Ramanuj, Consumer behaviour: Insights from Indian market, PHI Learning, New Delhi, (2010).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To apply concepts of consumer behaviour in marketing, branding and advertising decisions.
CO2	To analyse the intricacies of consumer buying behaviour and strategies of consumer attitude formation and change.
CO3	To appraise the various consumer decision making models
CO4	To design the value creation and diffusion strategies.

Course Code	**:**	MB834
Course Title	**:**	Services Marketing
Type of Course	**:**	PE
Prerequisites	**:**	Marketing Management
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	The course will teach students to understand the potential roles as executives of service producing organizations.
CLO2	The course encourages students to adopt a constructive critical posture as customers of service organizations.
CLO3	The course will demonstrate the various marketing and competitive strategies for service industries.

Course Content

Services Marketing - Nature - Need and Classification of services - Barriers and issues in Services Marketing in the Indian context.

Gaps model of Service Quality - Expectations and Perceptions - Measuring Service Quality SERVQUAL - Building Customer relationships and service recovery.

Positioning - Service Development and designing services - Service Blue Printing Quality Function Deployment - adding value - Physical evidence and services cape.

Pricing strategies for services - creating and managing service delivery - Balancing demand and capacity - waiting lines and reservation.

Integrated services marketing communication - Services advertising strategies – integrated model of services quality.

References

1.	Wilson A. Zeithaml V. A. Bitner M. J. and Gremler D. D. Services marketing: Integrating customer focus across the firm McGraw Hill 7th edition (2018).
2.	Lovelock Christopher and Jochen Wirtz. Services marketing: people technology strategy Pearson Education 8th edition (2017).
3.	Rust Roland T. Anthony J. Zahorik and Timothy L. Keiningham. Service marketing. HarperCollins (1996).
4.	Shanker Ravi. Services marketing The Indian perspectives Text and Readings Excel

	Books New Delhi 1st edition (2002).
5.	Hoffman K. Douglas and John EG Bateson. Services marketing: concepts strategies and cases. Cengage learning 5th edition (2017).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the potential roles as executives of service producing organizations
CO2	To evaluate the service problems and provide prepare insights to solve the issues.
CO3	To assess the various marketing and competitive strategies for service industries.

Course Code	**:**	MB835
Course Title	**:**	Customer Relationship Management
Type of Course	**:**	PE
Prerequisites	**:**	Marketing Management
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To train the participants in the concepts of Customer relationship management
CLO2	To teach the strategies for implementing CRM practices in any organization.
CLO3	To teach the practical implications in CRM domain

Course Content

Background and study - Marketing: Evolution and new Paradigms - CRM - Definition and the Basic Concepts - CRM and Services Marketing - Tools for CRM.

Significance of Customer Retention - Key Account Management - CRM and Knowledge Management - Life time value of the customer - Customer loyalty and involvement.

Data Mining and Data Warehousing - Real world applications.

Strategies for profitable dialog with customers - Sales Force automation - marketing automation - Call centres - BPO and KPO - Internal Relationships - External Relationships and Supplier relationships and Electronic Relationships.

CRM implementation and effectiveness - Digital CRM - Management of Relationships.

References

1.	Sheth Jagdish N. Customer relationship management: emerging concepts tools and applications, Tata McGraw Hill Education, (2017).
2.	Zikmund Jr William G. "Raymond McLeod Jr Faye W. Gilbert 2003, Customer Relationship Management, Integrating Marketing strategy and Information Technology, Wiley (2010).
3.	Godson Mark. Relationship marketing. OUP Oxford (2009).
4.	Brown Stanley A. and Price Waterhouse Coopers. Customer relationship management: A strategic imperative in the world of e business, John Wiley and Sons Inc. (2000).
5.	Greenberg Paul. CRM at the Speed of Light, McGraw Hill (2017).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop Customer relationship management frameworks using the concepts learned in the course
CO2	To develop strategies for implementing CRM practices in any organization solve the issues.
CO3	To assess the various marketing and competitive strategies using CRM techniques.

Course Code	**:**	MB836
Course Title	**:**	Marketing Research
Type of Course	**:**	PE
Prerequisites	**:**	Marketing Management
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	The course aims to provide deeper insight into the plan and implementation of various research designs for collecting vital marketing information for marketing decisions.
CLO2	The course train students to systematically approach to the problems and arrive at solutions.
CLO3	To teach the practical implications in Marketing Research domain

Course Content

Nature and Scope of Marketing Research - Conceptual aspects involved in marketing research Marketing research and marketing information system - marketing research process. Identification of marketing research Problems - Formulation of marketing research objectives.

Introduction to marketing application-based research design - Exploratory - secondary data qualitative research and its scope in marketing - Descriptive research - survey and observation.

Causal research - Market Experimentations - field work - Measurement - types of primary measurement - Scaling Concepts - Different kinds of scaling and their applicability for specific market problems - Scaling Techniques.

Questionnaire design and development specific to marketing - Concept of sampling Sampling types - merits and demerits - sample size determination - Point estimate - interval estimate and statistical power.

Data preparation - introduction to univariate - bivariate and multi variate data analysis.
Product Research - Advertising research - Market and sales analysis research - Marketing Research Agencies in India - Report writing.

References

1.	Naresh K. Malhotra & Satyabhushan Dash, “Marketing Research An applied Orientation”, Pearson, 6th Edition, (2012).
2.	Carl Mcdaniel and Roger Gates, “Contemporary Marketing Research” South Western College Publishing, Singapore, 4th Edition.,(1999).

3.	Tull, D.S. and Hawkins D.J. , "Marketing Research Measurement and Method" Prentice Hall, New Delhi, 6th Edition, (2009).
4.	Kinnear.T.C. and Taylor Jr "Marketing Research", Mcgraw Hill, New York, (1991).
5.	Green and Tull "Marketing Research", Prentice Hall, New Delhi.

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop a comprehensive marketing research plan.
CO2	To prepare marketing research blue print and research reports.
CO3	To assess the various marketing and competitive strategies using marketing research techniques.

Course Code	**:**	MB837
Course Title	**:**	Advertising Management
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment.

Course Learning Objectives (CLO)

CLO1	To understand the basic principles of campaign planning and execution.
CLO2	To know about the various media mix platforms.
CLO3	To learn about preparation of advertising campaign and media plan.
CLO4	To learn integrated marketing communications.

Course Content

Concept and definition of advertisement - Importance - Objectives - Communication mix - Advertising and Publicity - Classification of advertising - Social and Economic Implications of Advertisements.

Perspectives on Consumer Behaviour - Formation and Modification of Consumer Attitudes - Consumer memory - Advertising campaigns - Creative strategy - Advertising Design - Appeals - Advertisement copy - visual elements - layout - Story boarding.

Message design - Celebrity Endorsement - Advertising Media mix - Media strategy - Media planning and selection - Factors influencing Media selection - Scheduling - E Word of Mouth Communication.

Advertising budget - Process and methods - Evaluation of Advertising Effectiveness - Pre and Post Testing - Advertisement Liking.

Ad agency - Functions and structure - Cultural and Ethical Concerns in Advertising - Digital Advertising - Integrated marketing communications - Recent Trends in advertising - Relevant case studies.

References

1.	S.A.Chunawalla and K.C.Sethia, Foundations of Advertising Theory and Practice, Himalaya Publishing, New Delhi, (2022).
2.	Jaishri Jethwaney and Shruti Jain, Advertising Management, Oxford University Press, Second Edition, New Delhi, (2012).
3.	Belch E. George, Belch A. Michael, and Keyoor Purani, Advertising and Promotion, Tata Mc Graw Hill, New Delhi, (2021).
4.	S.H.H.Kazmi and Satish K Batra, Advertising and Sales Promotion, Excel Books, New Delhi, (2008).
5.	Rajeev Batra, John G. Myers and David A Aaker, Advertising Management, Prentice Hall, New Delhi, (2002).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To evaluate the role of advertising for business improvement.
CO2	To design the creative advertising strategies for business situations.
CO3	To understand the process of Advertising Planning and Budgeting.
CO4	To develop integrated marketing communications strategies.

Course Code	**:**	MB838
Course Title	**:**	Sales Management
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment.

Course Learning Objectives (CLO)

CLO1	The course exposes the students to the field sales environment.
CLO2	The course will teach the students about the sales tactics by using case studies.
CLO3	The course will guide students for setting their career in sales.

Course Content

Conceptual understanding of Sales Management - Importance of sales force management in the Indian context - Personal selling process - prospecting - pre approach - approach presentation - convincing the prospect - handling the objection and closing.

Forecasting Sales and Developing Sales Budgets - Designing and organizing Sales Territories.

Sales organisations - Relations with other departments -Profiling and recruiting salespeople - Selecting and hiring applicants.

Planning - executing and evaluation of sales training programs - Motivating a sales forceand Sales force compensation - Sales force expenses and transportation - Sales meeting and Sales contest.

Analysis of Sales Volume - Marketing Cost and Profitability Analysis - Evaluating Salespersons performance.

References

1.	Mark W. Johnston and Greg W. Marshall "Sales Force Management" TataMcGraw Hill Publishing Company Limited (2006).
2.	Still R.R. and Cundiff etal. "Sales Management Decision Strategies and Cases" Prentice Hall 4 ed. New Delhi (1996).
3.	Spiro Stanton Rich "Management of Sales Force" Tata Mcgraw Hill, 7th edition, New Delhi (2003).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the field sales environment.
CO2	To create sales tactics by using real time applications.
CO3	To understand the process of sales performance

Course Code	**:**	MB839
Course Title	**:**	Strategic Marketing
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment.

Course Learning Objectives (CLO)

CLO1	The course teaches two important strategic decisions in marketing "What market" and "What product".
CLO2	This course focuses on the tools and techniques used for taking these two important decisions.
CLO3	The course will guide students for setting their career in strategic marketing positions

Course Content

Analytical prerequisites for strategic planning - the nature of strategic planning Introduction to Strategic Market Planning - Business definition - Briefing of Strategic Market decisions like what product what market and what is strategy -Core competence.

Cost Dynamics - Defining the Unit of Analysis Scale and Experience Effect - Sources of the Experience Effect -Steps in analyzing the experience effect -Strategic implications ofPrices and experiences - Limitations to Strategy based on Experience or Scale -Practical considerations in using experience curves -Competitive and Industry Analysis.

Strategic Windows - Portfolio Analysis - Definition of "Product" and "Market" - GrowthShare Matrix - The Growth Gain Matrix - Strategic Intent - Strategic Fit and leverage.

Market Attractiveness and Business Assessment - Identifying - Relating and weighting the relevant factors of Market Attractiveness and Business Position - Constructing the present investment opportunity chart - assessing the future opportunity.

Market Share Analysis - The use of pooled business experience and comparison of formal methods like business Position analysis and PIMS.

References

1.	David A. Aaker & Christine Moorman- "*Strategic Market Management*" John Wiley & Sons-Inc- 12th Edition - Singapore (2023)
2.	Strategic Marketing Management - The Framework (2019), 10th Edition, Cerebellum Press
3.	Orville C. Walker- Jr- Harper W. Boyd-Jr and Jean-Claude Larreche - "Marketing Strategy-Planning and Implementation" Tata Mcgraw-Hill Publishing Company- 3rd Edition. New Delhi (2001).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To evaluate the important strategic from product and market context.
CO2	To understand the role of tools and techniques to prepare strategic decisions.
CO3	To assess the future business opportunity from a strategic point of view.

Course Code	**:**	MB840
Course Title	**:**	Marketing Metrics
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment.

Course Learning Objectives (CLO)

CLO1	To learn the common definition of the metrics being used in marketing today.
CLO2	To learn the use of marketing metrics to help shape how much we should be spending and on which marketing activities.
CLO3	To learn to draw the link from marketing expenditures to the financial wellbeing and to take an effective marketing decision.

Course Content

Introduction to marketing metrics - linking marketing to financial consequences - Shareof heart - Share of mind and Share of market - Role and importance of marketing metricsin strategic marketing decisions.

Selling Price - variable cost - average variable cost - market spending - Breakeven point and Target volume - customer recency retention - customer life time value prospect lifetime value - acquisition versus retention spending.

Trail - repeat - penetration - volume - CAGR - fair share draw -cannibalization rate brand equity metrics - conjoint utilities: segmentation - customer preference and volume projection.

Sales force coverage - goals - results - compensation - pipeline analysis - facings shares of shelf - out of stock - inventory turns - markdowns etc. Price premium - reservation percentgood value - price elasticity - optimal own cross and residual elasticity.

Baseline sales - incremental lifts redemption - rebates deal pass through waterfall Impressions - GRP OTS CPM reach frequency share of voice - click through rates costper impression - clicks - acquisitions - visitors and abandonment.

References

1.	Farris- Paul- et al. Key marketing metrics: the 50+ metrics every manager needs to know- 3rd Edition Pearson UK (2021)
2.	Davis- John A. Measuring marketing: 110+ key metrics every marketer needs. John Wiley & Sons (2012)
3.	Kumar- V. Profitable customer engagement: Concept- metrics and strategies. SAGE Publications India (2013)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To identify common definition of the metrics being used in marketing today.
CO2	To identify metrics that should be used by marketers.
CO3	To describe the use marketing metrics.
CO4	To create the link from marketing expenditures to the financial well-being and to take an effective marketing decisions.

Course Code	**:**	MB841
Course Title	**:**	Analytics for Strategic Market Planning
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment.

Course Learning Objectives (CLO)

CLO1	This course teaches students to build marketing response models for strategic marketing decisions.
CLO2	This course will teach students to sharpen their analytical skills by getting exposure to computer-based marketing models and tools for decision-making.
CLO3	The course will guide students for setting their career in marketing analytical roles

Course Content

Basics of marketing analytics - marketing decisions models - characteristics - types and benefits of marketing decisions models - Response models - types - calibration - Objectives interactions effects - dynamic effects - competitive effects - models in individual levels shared experience and qualitative models.

The segmentation process and defining the market with models - Segmentation research methods using factors analysis and cluster analysis - behaviour based segmentation: cross classification - regression and choice - based segmentation - customer heterogeneity - issues and challenges.

Differentiation and positioning - perceptual maps: developing perceptual map - multi dimensional scaling techniques - attribute based and similarity based joint space mapping.

Strategic marketing decisions - market demand and trend analysis - product life cycle - cost dynamics: scale and experience effects.

Market entry and exit decisions - PIMS: shared experience models - product portfolio models: BCG, GE etc. - Financial models - analytical hierarchy process.

References

1.	Lilien, Gary L. and Arvind Rangaswamy , "Marketing Engineering: Computer-Assisted Marketing Analysis and Planning". Revised Second Edition, Trafford Publishing, (2005).
2.	Gary Lilien, Arvind Rangaswamy and Arnaud De Bryun, Principles of Marketing Engineering and Analytics Revised third edition (2017) Decision Pro Inc.
3.	Wayne L Winston, "Marketing Analytics – Data Driven Techniques with Microsoft Excel" Wiley, (2014)
4.	Dinesh Kumar, "Business Analytics – The Science of Data Driven Decision Making", Wiley, (2017)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To take data empowered strategic marketing decisions by using analytical techniques.
CO2	To sharpen their analytical skills by getting exposure to computer-based marketing models and tools for decision making.
CO3	To assess the future business opportunity from a marketing analytics point of view.

Course Code	**:**	MB842
Course Title	**:**	Analytics for Strategic Market Implementation
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment.

Course Learning Objectives (CLO)

CLO1	To know how to take data empowered decisions by using analytical techniques in the area of marketing strategies.
CLO2	To focuses on product, integrated marketing communications, price and promotions, and sales force and channels strategies.
CLO3	To improve skills in viewing marketing processes and relationships systematically and analytically.

Course Content

Models for new product decisions: identifying opportunities - product design and forecasting - conjoint analysis for product design - bass model for forecasting the sales of new product - assessor model for pretesting.

Nature of advertising - advertising effects - budget decisions - copy and development decisions - copy development and measuring effectiveness - estimating the creative quality of advertisements.

Sales force models - sales force sizing and allocation - sales territory design and sales force compensation - sales call effectiveness and efficiency - gravity model of market channel decisions.

Sales promotion types and effects - aggregate model to analyse promotional effects analyzing individual response to promotions.

Digital Business strategy - Digital Market implementation - Digital strategies and Case studies.

References

1.	Lilien, Gary L. and Arvind Rangaswamy, "Marketing Engineering: Computer-Assisted Marketing Analysis and Planning". Revised Second Edition, Trafford Publishing, (2005).
2.	Gary Lilien, Arvind Rangaswamy and Arnaud De Bryun, Principles of Marketing Engineering and Analytics Revised third edition (2017) Decision Pro Inc.
3.	Wayne L Winston, "Marketing Analytics – Data Driven Techniques with Microsoft Excel" Wiley, (2014)
4.	Dinesh Kumar, "Business Analytics – The Science of Data Driven Decision Making", Wiley, (2017)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To take data empowered decisions by using analytical techniques in the area of marketing strategies.
CO2	To develop market-based product, integrated marketing communications, price and promotions, and sales force and channels strategies.
CO3	To improve skills in viewing marketing processes and relationships systematically and analytically.

Course Code	**:**	MB843
Course Title	**:**	Business Market Management
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment.

Course Learning Objectives (CLO)

CLO1	The course will teach the basic concept of business marketing with respect to customer value management with several application areas.
CLO2	The course will enable students to understand the business market needs and solve their problems accordingly.
CLO3	The course will guide students for understand the market requirements and to arrive at a optimized product decision

Course Content

Business market: Types of Market Offerings and Customers - Business Market and Managing Value - Business Market Process - Business Networks and International Business Markets.

Defining Market Segment - Competitor Analysis - Assessing Customer Value - Purchase Orientations and Decision Process - Crafting Business Market Strategy.

Managing Market offerings: Conventional and Flexible Market Offerings - Value Based Pricing - Market Offering Across Borders - New Offering Realizations: Realization Strategy - Process Model. Business Channel management: Designing Value Added Market Channel - Direct

Channel - Enhancing Resellers Performance.

Gaining Customers: Prospecting new business relationship - Sustain resellers partnership - sustaining customer relationship.

Marketing Business related to Standard Industrial Products and Services - Fabricated Industrial Products - Capital Equipments and Services.

References

1.	Anderson James and James A. Narus. Business Market Management: Understanding Creating and Delivering Value Pearson Education New Delhi, 3rd edition,n (2010).
2.	Hutt Michael D. and Thomas W. Speh. Business marketing management: B2B South Western Publication, 12th edition, (2016).
3.	Dwyer F. Robert and John F. Tanner Business marketing: Connecting strategy relationships and learning, McGraw Hill, New York (2005).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To prepare business marketing strategy to create customer value across several application areas.
CO2	To understand the business market needs and solve their problems accordingly
CO3	To assess the market conditions and develop product launch planning accordingly

Course Code	**:**	MB844
Course Title	**:**	International Marketing
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment.

Course Learning Objectives (CLO)

CLO1	The course will enable understanding of the international marketing scenario.
CLO2	The course will contrast the marketing strategies associated with different world regions.
CLO3	The course will guide students for setting their career in international marketing roles

Course Content

The concept and the need for international marketing - the nature and scope and variety of international markets. International market Vs Local Markets - differences and Similarities.

Trade groups - international regulations - trade bodies and organisations like IMF - World Bank and Conferences eg. GATT UNCTAD - their impact on world trade Euro - dollar and Petro Dollar Market. Exchange rate fluctuations - Imports - Exports evaluate.

Approaching opportunities and risks in international market - foreign market channels export potential of various regions like America Europe Africa etc. Marketing Research ĥInternational

Markets.

Product planning and development of product to suit international market - Marketing intelligence - product features like utility packaging finish other attributes for global markets - pricing decisions.

Export process - L/C policies of ECGC - Technology transfer regulation - investment regulations like FERA - Exchange regulation with countries. Documentation - QC requirements - procedure for Central Excise - Customs - Shipment - duty drawback procedures to claim cash assistance - Export House concept - Hall Transactionbetween Exporter and Importer etc.

References

1.	Varshney R. C. and B. Bhattacharya. International Marketing Indian Perspective, Sultan Chand publication, (2012).
2.	Paul Justin. International marketing: text and cases, Tata McGraw Hill Education, (2012).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the international marketing scenario.
CO2	To create international marketing strategies for different goods and services.
CO3	To assess the future business opportunity in International Marketing

Course Code	**:**	MB845
Course Title	**:**	Digital Marketing
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment.

Course Learning Objectives (CLO)

CLO1	The course is to help students to understand and evaluate digital marketing methods and web analytics tools
CLO2	The course will provide a holistic understanding about the digital business model
CLO3	The course will teach the students about digital campaign management.

Course Content

Introduction to digital marketing - Digital Tools - Organic Vs Paid way of Marketing Search Engine Marketing - Online Advertising - EmailMarketing - Blog Marketing Social Media Marketing - Multimedia Marketing - Mobile Marketing - Affiliate Marketing and Video Marketing.

Search Engine Marketing - Understanding Search Engine Marketing - Essential Search Engine Optimization - Advanced SEO Techniques and Tracking Search Performance. Online advertising - Understanding Online Advertising - Pay per Click Advertising Display

Advertising and Tracking Ad Performance. Email marketing - Understanding Email Marketing

Social media marketing - Understanding Social Media - Participating in SocialNetworking Tracking Social MediaMarketing Performance. Better use of AI in performance marketing. Multimedia marketing - PodcastMarketing - Video Marketing and Tracking Multimedia Marketing Performance.

Mobile marketing - Understanding Mobile Marketing - Designing a Mobile - FriendlyWebsite - Advertising on Mobile Devices - Marketing via Mobile Apps and Tracking Mobile Marketing Performance. Affiliate marketing - The building blocks of affiliate marketing - Tools of the trade and Setting up a campaign.

Introduction to web analytics - Competitive Intelligence and Web 2.0 Analytics - DefiningSite Goals - KPIs and Key Metrics - Clickstream Analysis - Measuring Success Competitive Intelligence Analysis - Emerging Analytics: Social Mobile and Video.

References

1.	Bell David R. Location Is (Still) Everything: The Surprising Influence of the Real World on How We Search Shop and Sell in the Virtual One, Boston New Harvest (2014).
2.	Kaufman Ira and Chris Horton Digital Marketing: Integrating Strategy and Tactics with Values New York Routledge (2014).
3.	Stokes Rob and the Minds of Quirk eMarketing: The essential guide to marketing in a digital world Quirk Education (Pty.) Ltd. 5th edition (2013).
4.	Miller Michael. The ultimate web marketing guide. Pearson Education (2010).
5.	Kaushik A. Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity (2009).
6.	Burby J. and Atchison S. Actionable web analytics: using data to make smart business decisions. John Wiley and Sons (2007).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To create digital marketing campaigns.
CO2	To analyse the competitor mixes and provide strategic solutions to digital marketing mixes.
CO3	To assess the omni market conditions and create a comprehensive digital marketing plan

Course Code	**:**	MB846
Course Title	**:**	Neuro Marketing
Type of Course	**:**	PE
Prerequisites	**:**	NIL
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment.

Course Learning Objectives (CLO)

CLO1	This course will enable students to learn marketing psychology and neuroscience
CLO2	This course will explain Brain anatomy and functionality (neuroanatomy and neurophysiology) and techniques used to register human brain activity.
CLO3	This course will teach the current applications of neuroscience to consumer research through actual consumer neurosciences companies and cases.

Course Content

Combining consumer behavior and neuroscience - The evolution/neuroanatomical perspective The psychological/behavioral and innovation/product development perspective - Behavioral models and measures (judgments choices decision times errors) - Innovation and evaluating ideas for new products, including trial/repeat studies/models for new products.

The measurement/computational perspective - Physiological (eye movements pupil size skin conductance heart rate) and neural measurement (EEG, PET, fMRI, single cell recordings) procedures; neuroscience and commercial marketing research.

The visual system - including the eye retina midbrain visual cortex and related association areas; visual attention including goal directed and stimulus driven pathways in the parietal and frontal lobes; locating and identifying objects.

Transduction by sense organs - primary brain structures and the role of experience/learning for hearing, taste, smell, skin sensations and pain; muscle movements - reflexes skilled movements; sensory restoration/enhancement and prosthetics.

Amygdala - hippocampus - cingulate - orbitofrontal cortex - hypothalamus; intensity and valence of emotion; measures of emotion. Hierarchy of effects models; evaluative conditioning; neural correlates of brand preferences and brand loyalty.

References

1.	Ramsoy Thomas Z. “Introduction to Neuromarketing and Consumer Neuroscience”. Copenhagen Denmark: Neurons Inc (2015).
2.	Gazzaniga Ivry and Mangun “Cognitive Neuroscience: The Biology of Mind” 4th edition New York NY: Norton and Co (2014).
3.	Purves Cabeza Huettel LaBar Platt and Woldorff “Principles of Cognitive Neuroscience” 2nd edition Sunderland MA: Sinauer and Associates (2013).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To view the marketing communications from psychological and behavioural aspects
CO2	To explain Brain anatomy and functionality (neuroanatomy and neurophysiology) and techniques used to register human brain activity.
CO3	To prepare an effective marketing plan as to attract various consumer segments based on their neuro-sensory behaviors.

Financial Management

Course Code	:	MB851
Course Title	:	Financial Institutions and Services
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide students with comprehensive knowledge of various financial institutions, including banks, insurance companies, investment firms, and non-banking financial companies (NBFCs).
CLO2	To introduce students to a wide range of financial products offered by these institutions, such as loans, mortgages, insurance policies, investment funds, and securities.
CLO3	To equip students with an understanding of the different financial services available to businesses, such as asset management, wealth management, financial advisory, and underwriting services.
CLO4	To enable students to analyze and evaluate the suitability and effectiveness of different financial services and products for various business scenarios and strategic objectives.

Course Content

The nature and role of financial system- Financial structure- Different financial functions - Financial system and economy-Reforms in the financial system- Recent developments.

Regulatory and non regulatory institutions-Banking and nonbanking institutions – Development financial institutions.

Money market- Capital markets- Debt market-Derivatives market – Primary and secondary markets- Financial instruments in the respective markets.

Merchant banking services- Mutual funds- Bill discounting – Factoring- Venture capital - Leasing Hire Purchase

Non fund based financial services,- Credit cards- Insurance- Pension- Micro Finance Depositories and custodians -Credit rating,-Securitization -Stock exchanges and their functioning

References

1.	Pathak Bharathi V, The Indian Financial System, 5 th edition, Pearson Education, Chennai(2018).
2.	Bhole L M and Mahakud Jitendra, Financial Institutions and Services, 6 th edition, Tata McGraw Hill Education, New Delhi (2017).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To identify and describe the roles and functions of various financial institutions, including banks, insurance companies, investment firms, and non-banking financial companies (NBFCs)
CO2	To explain the characteristics and purposes of a wide range of financial products offered

	by these institutions, such as loans, mortgages, insurance policies, investment funds, and securities.
CO3	To understand and articulate the different financial services available to businesses, including asset management, wealth management, financial advisory, and underwriting services.
CO4	To analyze and assess the suitability and effectiveness of different financial services and products for various business scenarios and strategic objectives, making informed recommendations based on their evaluations.

Course Code	:	MB852
Course Title	:	Investment Security Analysis and Portfolio Management
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To develop a comprehensive understanding of investment securities and financial markets
CLO2	To learn about different types of investment products and their role in portfolio construction
CLO3	To learn fundamental investment theories and apply them to portfolio management
CLO4	To understand the principles of risk management and diversification to construct and manage investment portfolios

Course Content

The organization and mechanics of securities markets - Various securities - Characteristics Objectives of the security analysis - Frictions of an organized security market - Mechanics of security trading - Sources of Investment Information.

Internal value and market value of various securities - Internal value and market value of firm Economic analysis - Industry analysis.

Company analysis - Financial Statement analysis - projecting earnings under stable as well as dynamic conditions - risk and return factors.

Portfolio theory - Portfolio criteria Efficient Set - Portfolio selection and diversification - The shape of the risk function - CAPM model - Technical analysis - Random Walk Martingale Model.

Portfolio Objectives - Size of portfolio - Portfolio selection - Basis and Readjustment Timings of disinvestments - Portfolio performance.

References

1.	Donald Fischer, Ronald Jordan and Ashwini Pradhan, Security Analysis and Portfolio Management", 7th edition, Pearson Education, New Delhi (2018)
2.	Bhalla V K, Investment management Security analysis and portfolio management, 19th edition, S. Chand and Company Pvt Ltd, New Delhi (2013).
3.	Kannadasn. M., Fixed Income Securities: Valuation and Risk Management, Cengage, (2022).
4.	Chandra Prasanna, Investment Analysis and Portfolio Management, 5th edition, Tata

	McGraw Hill, New Delhi (2017).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the mechanics of securities markets, types of securities, and sources of investment information.
CO2	To analyse and evaluate the internal and market value of various securities, including firm and economic analysis.
CO3	To conduct financial statement analysis and project earnings under stable and dynamic conditions, while considering risk and return factors.
CO4	To apply portfolio theory, selection, and diversification techniques to build an efficient portfolio and assess portfolio performance

Course Code	**:**	MB853
Course Title	**:**	Financial Derivatives
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide students with a comprehensive understanding of the fundamental concepts and types of derivatives, including forwards, futures, options, and swaps.
CLO2	To introduce students to the analytical methods and mathematical models used in the valuation of derivatives, such as the Black-Scholes model and binomial option pricing model.
CLO3	To enable students to apply derivatives in formulating and implementing simple corporate financial management strategies, such as hedging, risk management, and speculative strategies.
CLO4	To equip students with the skills to analyze and interpret the impact of derivatives on corporate financial statements and overall financial performance

Course Content

Introduction to Financial Derivatives – Types of Derivatives –Forwards, Futures, Swaps, Options - Application of derivatives in Risk Management

Forwards & Futures market- Mechanics of futures markets - Different categories of Forwards & Futures - Hedging strategies - Valuation- Determination of forward and futures prices - Risk management using Forwards and Futures

Characteristics of Swaps- Categories of Swaps- Mechanics of interest rate swaps - Currency swaps - Application- Valuation- Usage of Swaps in Risk Management

Types of Options & their characteristics – Specification of stock options – Application of options- Valuation - Properties of stock options - Merton model - Binomial trees - The Black - Scholes Model –Risk Management using Options

Other derivatives - Credit Derivatives, Interest Rate Derivatives, Insurance Derivatives, Exotic Options - Derivatives Pitfalls - Current trends in India.

References

1.	Hull.c.John. and Sankarshan Basu. Options, Futures and Other Derivatives, 10 th edition, Pearson Education, Chennai (2018).
2.	Gupta S L.,Financial Derivatives: Theory, Concepts and Problems, 2 nd edition, PHI learning, New Delhi (2017).
3.	Durbin Michael, All About Derivatives. 2 nd edition, Tata McGraw Hill publications, New Delhi(2010).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To explain the fundamental concepts and types of derivatives, including forwards, futures, options, and swaps.
CO2	To use the analytical methods and mathematical models, such as the Black-Scholes model and binomial option pricing model, to accurately value various types of derivatives.
CO3	To apply derivatives in developing and implementing simple corporate financial management strategies, such as hedging, risk management, and speculative strategies, to mitigate financial risks and enhance financial performance.
CO4	To analyze and interpret the impact of derivatives on corporate financial statements and overall financial performance, making informed recommendations for their strategic use.

Course Code	**:**	MB854
Course Title	**:**	Investment Banking
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand the role and functions of investment banking in the Indian and global financial markets.
CLO2	To familiarize students with the legal and regulatory frameworks of investment banking, including issue management and disinvestment.
CLO3	To provide conceptual understanding of international financial instruments and their modalities.
CLO4	To introduce valuation techniques and the regulatory framework of investment banking, stock exchanges, and share brokers.

Course Content

Introduction to Financial concepts and instruments - Investment banking - Global/Indian Investment Banking Industry Scenario - Activities - Investment Banking Vs Merchant banking - Functions.

Guidelines for Issues Management - IPO - Offer documents - Management of capital issues - Pre

issue activities - Post issue activities - Underwriting and Brokerage - Registrar and Share transfer Agents - Pricing and Marketing of public issues - Listing Guidelines.

Corporate Restructuring - Disinvestment mechanisms - Buybacks - Mergers - Acquisitions - Delisting - Methods - Procedures - Problems - Cases.

International Financial instruments - Debt and Equity - ADR - GDR - ECBs - FCCBs – NIFs - MTNs - Raising of offshore Finance - Sources - Advantages - Risk - Legal aspects and Modalities.

Corporate Valuation - Bond and Equity Valuation - Models - Secondary Markets - Regulatory Framework of Investment Banking, Stock Exchanges and Share Brokers - Recent Developments.

References

1.	Verma. Merchant Banking: Organisation and Management, Tata McGraw Hill, New Delhi (2005).
2.	Pratap G Subramanyam. Investment Banking: Concepts, Analyses and Cases. Tata McGraw Hill, New Delhi (2007).
3.	Investment Banking and Capital Markets, D. Choudhury and R. Sinha, PHI Learning Private Limited, 1st Edition (2014).
4.	Investment Banking Workbook, Joshua Pearl and Joshua Rosenbaum, John Wiley and Sons, 2nd Edition (2013).
5.	Investment Banking: Valuation, Leveraged Buyouts, and Mergers and Acquisitions by Joshua Rosenbaum and Joshua Pearl, John Wiley and Sons, 2nd Edition (2013). Machiraju H R, Merchant Banking, 4th Edition, New Age Publishers (2010).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the role of investment bankers and the services they offer and to gain knowledge about the prevailing legal and industry frameworks of investment banking.
CO2	To develop a conceptual understanding of the global and Indian investment banking process.
CO3	To understand the guidelines for issue management and the process of IPO, management of capital issues, underwriting and brokerage, and marketing of public issues.
CO4	To learn about disinvestment mechanisms such as buybacks, mergers, acquisitions, and delisting and understand the regulatory framework of investment banking, stock exchanges, and share brokers.

Course Code	**:**	MB855
Course Title	**:**	Asset Based Financing
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide students with a comprehensive understanding of the concept of asset-based financing and its role in corporate finance.
CLO2	To familiarize students with various types of assets that can be used as collateral in asset-based financing.

CLO3	To introduce students to the legal and regulatory frameworks governing asset-based financing in India.
CLO4	To equip students with the skills and knowledge required to evaluate the creditworthiness of borrowers and manage the risks associated with asset-based financing.

Course Content

Lease Financing - Concept - Types - Lease Evaluation and Accounting - Hire Purchasing concepts Evaluation and Accounting.

Bills discounting - Factoring - Forfaiting - Types - Advantages - Inter Corporate Lending - Money Market systems - Debt instruments.

Asset Securitization - Consumer Finance - Pricing - Marketing - Insurance - Retail Finance - Products covered - Instalment Credit System.

Refinancing by finance company schemes - Procedures - Utility.

Legal/Modalities of Nidhis - Benefit funds Chits - Other non-banking companies.

References

1.	Kothari Vinod, Lease Financing and Hire Purchasing, Wadhwa and Company, New Delhi (2001).
2.	Richard Brealy, Stewart Myers, Franklin Allen and Pitabas Mohanty, Principles of corporate finance, 12th edition, Tata Mcgraw Hill, New Delhi (2018).
3.	Asset Based Financing: A Practical Guide to Secured Lending by Robert J. Rhee (Wiley, 2019).
4.	Asset Based Lending: A Practical Guide to Secured Financing by Richard L. Goldwasser (Thomson Reuters, 2019).
5.	Commercial Finance: A Transactional Approach by David G. Epstein, et al. (LexisNexis, 2019).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To Understand the concept and scope of asset-based financing in corporate finance.
CO2	To Identify the different types of assets that can be used as collateral in asset-based financing.
CO3	To Analyse the legal and regulatory frameworks governing asset-based financing in India
CO4	To Evaluate the creditworthiness of borrowers and manage the risks associated with asset-based financing. Apply the concepts and skills learned in real world financial scenarios

Course Code	:	MB856
Course Title	:	Behavioral Finance
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To explore the behavioral factors that influence financial markets and the corporate world, examining the peculiarities of human behavior in financial and investment management.
CLO2	To establish the connection between behavioral mechanisms and aspects of corporate and risk management, demonstrating how human behavior impacts these areas.
CLO3	To apply basic psychological frameworks, including mechanisms of information perception, emotions, memory, and attention, to understand their impact on financial decision-making.
CLO4	To provide insights into various behavioral mechanisms and how they affect financial markets and corporate decision-making, enhancing the understanding of behavioral finance principles.

Course Content

Cognitive information perception - Weber law - Subjective probability - Representativeness anchoring asymmetric perception of gains and losses framing and other behavioural effects - Decision making under risk and uncertainty - Expected utility as a basis for decision making - The evolution of theories is based on the expected utility concept - Decision making in historical perspective - Allais and Ellsberg's paradoxes - Rationality from an economics and evolutionary perspective - Different ways to define rationality - Why humans often act outside of the economic rationality framework - Herbert Simon and bounded rationality - Investor rationality and market efficiency - Empirical data that questions market efficiency.

Empirical data that challenge the Efficient Markets Hypothesis - Fundamental information and financial markets - The information available for market participants and market efficiency - Market predictability - The concept of limits of arbitrage and model by Shleifer and Vishny Asset management and behavioural factors - Active portfolio management return statistics and sources of systematic underperformance - Fundamental information, technical analysis, and behavioural factors.

Weather emotions and financial markets sunshine geomagnetic activity - Mechanisms of the external factor influence on risk perception and attitudes - Connection to human psychophysiology and emotional regulation - Misattribution as a mechanism for external factors influence - Emotional content of news articles and their correlation with market dynamics - Social trends and market dynamics music fashion demographics.

Behavioral factors and corporate decisions on capital structure and dividend policy - Timing of good and bad corporate news announcement - Mergers and acquisitions and the Winner's Curse IPO underpricing - Systematic excessive optimism and overconfidence in managers' decisions - Sunk costs and mental accounting - Evolutionary explanations for behavioral effects - Evidence from behavioral game theory - Systematic approach to using behavioral factors in corporate decision making.

Experimental measurement of risk related preferences: measuring risk through probabilistic set of gambles through questionnaire - Emotional mechanisms in modulating risk taking attitude - Neurophysiology of risk taking - Personality traits and risk attitudes in different domain - Neurophysiology of decision making the role of hormones and neurotransmitters - How tools from cognitive neuroscience can aid in understanding the basics of economic behaviour - Introduction to the science of neuroeconomics and Neuro marketing.

References

1.	Pompian, Michael M, Behavioral Finance and Wealth Management, Wiley, New Jersey (2006).
2.	Hersh Shefrin, Behavioural Corporate Finance, Tata Mc Graw Hill Irwin Publishers, New Delhi (2007).
3.	Nofsinger R John, The Psychology of Investing, 6th edition, Pearson Prentice Hall, Chennai (2017).
4.	Statman Meir, What Investors Really Want, McGraw Hill Professional, New Delhi (2010).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To Illustrate the difference between expectations of efficient, rational investor behavior and actual behavior.
CO2	To explain the foundations of behavioural finance.
CO3	To evaluate behavioural aspects of investing.
CO4	To examine the various aspects of emotions and decision making of behavioural science.

Course Code	**:**	MB857
Course Title	**:**	Personal Finance
Type of Course	**:**	PE
Prerequisites	**:**	None
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	Provides knowledge by providing importance and need for personal finance.
CLO2	Understand the importance of setting financial goals.
CLO3	Understand how to use the resources available as a consumer.
CLO4	Determine the risk levels of the consumer.

Course Content

Personal Finance Basics and the Time Value of Money - Financial Aspects of Career Planning - Money Management Strategy - Financial Statements and Budgeting - Planning Your Tax Strategy.

Financial Services - Savings Plans and Payment Accounts - Introduction to Consumer Credit - Choosing a Source of Credit - The Costs of Credit Alternatives.

Consumer Purchasing Strategies and Legal Protection - The Housing Decision – Factors and Finances.

Property and Motor Vehicle Insurance - Health - Disability - Long-Term Care Insurance - Life Insurance.

Investing Fundamentals - Investing in Stocks - Investing in Bonds - Investing in Mutual Funds Investing in Real Estate and Other Investment Alternatives - Starting Early Retirement Planning.

References

1.	Kapoor Jack, Dlabay Les and Hughs Robert, Personal Finance, 10th edition, Irwin/McGraw Hill, New Delhi (2011).
2.	Madura Jeff, Personal Finance, 6th edition, Pearson education, Chennai (2016).
3.	"Personal Finance" by Dr. TV Rao and Dr. P. Subba Rao, Himalaya Publishing House, (2016).
4.	"Personal Financial Planning" by Dr. Rajan K. Gupta, Taxmann Publications Pvt. Ltd., (2019).
5.	"Personal Finance" by Dr. VK Bhalla, Anmol Publications Pvt. Ltd., (2015).
6.	"Personal Financial Planning" by Dr. Jitendra P. S. Solanki, CCH India, (2017).
7.	"The Wealth Book: Winning with Wealth" by Aalok Doshi and Dr. Neha Bagaria, Sage Publications Pvt. Ltd., (2021).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the importance of personal finance and its role in achieving financial goals.
CO2	To develop effective money management strategies through budgeting and financial planning.
CO3	To analyse and compare different financial services and credit options to make informed decisions.
CO4	To understand different types of insurance and how to choose appropriate coverage.

Course Code	**:**	MB858
Course Title	**:**	Advanced Corporate Finance
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide students with a deeper understanding of complex financial models and tools used in capital budgeting and corporate financing decisions.
CLO2	To develop the skills needed to analyse and evaluate various financial strategies, including leasing and mergers/amalgamation, in the context of corporate tax planning and revival
CLO3	To enable students to apply theoretical concepts to practical financial scenarios and make informed decisions based on financial analysis.
CLO4	To enhance students' critical thinking and problem-solving skills through case studies and real-world examples in corporate finance.

Course Content

Stochastic Models for risk and uncertainties in Capital budgeting.

Capital Structure determination - Equity and Debt forms - EM Hypothesis.

Corporate financing and market efficiency.

Concepts - Types - Lease Evaluation and Accounting - Lease rentals - Legal Aspects.

Merger as a Strategy - SEBI Guidelines - Corporate Tax Planning - Amalgamation - Sickness - Revival - BIFR Provisions.

References

1.	Thomas Copeland, Fred Weston, Joseph Katz and Kuldeep Shastri. Financial Theory and Corporate Policy, 4th Edition, Pearson India, Chennai, (2007).
2.	Pandey I M. Financial Management. 11th edition, Vikas publishing House Pvt. Ltd, New Delhi, (2018).
3.	Financial Management: Theory and Practice by Eugene F. Brigham and Michael C. Ehrhardt, Cengage Learning, 16th Edition, 2021.
4.	Prasanna Chandra, Financial Management, Tata McGraw Hill Education, 11th Edition, (2020).
5.	Aswath Damodaran, Corporate Finance: Theory and Practice, John Wiley and Sons, 4th Edition (2020).
6.	Richard Brealy, Stewart Myers, Franklin Allen and Pitabas Mohanty, Principles of corporate finance, 12th edition, Tata Mcgraw Hill, New Delhi (2018).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the application of stochastic models in risk and uncertainty analysis in capital budgeting.
CO2	To evaluate the different types of capital structure and the role of equity and debt in it and to analyze the efficiency of corporate financing in the market.
CO3	To demonstrate knowledge of leasing concepts, evaluation, accounting, and legal aspects.
CO4	To develop strategies for mergers and amalgamation in compliance with SEBI guidelines and corporate tax planning and understand the provisions for sickness and revival under BIFR.

Course Code	**:**	MB859
Course Title	**:**	Insurance and Pension Schemes
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide students with a comprehensive understanding of insurance and pension schemes in India.
CLO2	To introduce students to the various types of insurance and pension products available in the market.
CLO3	To familiarize students with the regulatory framework governing insurance and pension schemes in India.
CLO4	To develop analytical skills of students in assessing the suitability of insurance and

	pension products for individual and organizational needs.

Course Content

Concept of insurance - Principles of risk management - Types of insurance - Insurance market in India - Regulatory frameworks - Purpose and Need for Insurance fundamentals of agency law - Legislative and regulatory matters (IRDA).

Procedure for becoming an agent - code of conduct - Functions of an agent - Company profile - Fundamentals/principles of life insurance - Financial planning and taxation.

Life insurance products - Options, guarantees and siders - Group insurance and pension plans - Health related insurance related insurance policies/Marine policies/Insurance documents.

Obligations of insurers to rural and social sectors - Claims - Agency commission structure personal development - Behavioural aspects.

Pension schemes in India - Types of pension schemes - Regulatory frameworks for pension schemes - Analysis of pension schemes.

References

1.	M.N. Mishra Insurance: Principles and Practices, , S. Chand and Co (2021).
2.	Ramesh Bhat, Pension Schemes and Insurance, Himalaya Publishing House (2020).
3.	IRDAI., Handbook on Insurance by Insurance Regulatory and Development Authority of India (2023).
4.	Holyoake Julia. and Bill Weipers., Insurance, 4th Rev. edition, Financial World Publishing (2004).
5.	R. Kothari, Insurance and Risk Management, SS Book Depot (2017).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To analyze and compare different types of insurance and pension products available in the market.
CO2	To evaluate the benefits and drawbacks of different insurance and pension schemes.
CO3	To understand the regulatory framework governing insurance and pension schemes in India.
CO4	To develop skills in assessing individual and organizational needs for insurance and pension products.

Course Code	**:**	MB860
Course Title	**:**	Strategic cost Accounting and Management control
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To develop an understanding of the strategic role of cost accounting and management control in organizations

CLO2	To introduce the students to different costing techniques and their applications in decision making.
CLO3	To provide an understanding of performance measurement systems and their role in control and motivation
CLO4	To equip the students with the knowledge of using management accounting tools for strategic planning and control.

Course Content

Costing Concepts - Costing methods - Techniques - Analysis - Behaviour of cost and their impact in business.

Cost ascertainment - Cost allocation - Cost analysis - Cost control - Standard costing - Process costing - Revenues management.

Costing information for decision making - Pricing decisions and cost management - Concepts used in costing - Target Costing - activity based costing and activity based management - Balanced score cards - application in business environments and their usefulness in decision making.

Budgets and budgetary control - Types of Budgets - Zero Based Budgeting - Characteristics of Each responsibility accounting - Capacity analysis.

Capital budgeting and cost analysis - management control and transfer pricing - performance measurement

References

1.	Horngren Charles, Datar Srikant and Foster George., Cost Accounting: A Managerial Emphasis, Pearson Prentice Hall, Chennai, (2006).
2.	Strategic Cost Management: The New Tool for Competitive Advantage, Shank and Govindarajan, (2019). Cost Accounting: A Managerial Emphasis, Horngren, Datar, and Rajan, (2021).
3.	Management Control Systems: Performance Measurement, Evaluation and Incentives, Merchant and Van der Stede, (2020).
4.	Khan M Y and Jain P K, Cost accounting, 2nd edition, Tata Mcgraw Hill Education, New Delhi (2014).
5.	Tulsian P C and Bharat Tulsian, Cost accounting, 8th edition, S.Chand and Company, New Delhi (2014).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop an understanding of cost accounting principles and their application in different contexts.
CO2	To understand the importance of performance measurement and management control systems in achieving organizational Objectives.
CO3	To evaluate and apply different management accounting tools and techniques for strategic planning and control.
CO4	To develop the ability to communicate and present management accounting information effectively.

Course Code	:	MB861
Course Title	:	Tax Laws and Tax Planning
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide an understanding of the Indian taxation system and its impact on business decisions.
CLO2	To develop the skills required for effective tax planning and management.
CLO3	To impart knowledge about the legal provisions and compliance requirements under various tax laws.
CLO4	To provide an overview of the recent changes and trends in the taxation system in India.

Course Content

Overview of Direct and Indirect Taxes in India - Basic Principles of Income Tax Law - Assessment of Income Tax - Penalties and Prosecutions under Income Tax Law - Introduction to Goods and Services Tax (GST) Law.

Residential Status and Tax Incidence - Heads of Income and their Taxation - Deductions from Income and Taxable Income Calculation - Clubbing of Income and Set - off and Carry Forward of Losses - Tax Planning Strategies for Individuals and Corporates.

Taxation of Business Income - Taxation of Capital Gains - Taxation of Dividend Income - Minimum Alternate Tax (MAT) and Alternate Minimum Tax (AMT) - Taxation of Foreign Companies and Non - Residents.

Overview of GST Law in India - GST Registration and Return Filing - Input Tax Credit (ITC) and its availability - GST Compliance and Audit.

Tax Planning Strategies for Corporates and Individuals - Role of Tax Consultants and Professionals - Compliance with Tax Laws and Filing of Returns - Taxation and Cross - Border Transactions.

References

1.	Mittal Preeti Rani, Bansal Anshika, Income Tax Law and Practice, Sultan Chand & Sons Company, New Delhi (2024).
2.	Arpit Haldia and Mohd. Salim, GST Law and Practice, Taxmann Publication, (2023).
3.	Taxmann's Direct Taxes Manual, Taxmann Publications, (2023).
4.	Girish Ahuja and Ravi Gupta. Systematic Approach to Tax Laws & Practice, Commercial Law House Publishers, (2022).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To apply tax planning techniques in real world scenarios.
CO2	To gain a comprehensive understanding of the Indian taxation system and its impact on businesses.
CO3	To analyze and interpret the tax laws and regulations in India.
CO4	To identify and evaluate the tax implications of various business decisions and to develop tax efficient strategies for businesses

Course Code	:	MB862
Course Title	:	Treasury Management
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide an understanding of the principles and practices of treasury management in corporate finance
CLO2	To equip students with knowledge of the financial instruments and techniques used in treasury management
CLO3	To develop skills in cash management, foreign exchange management, and risk management
CLO4	To prepare students to apply treasury management concepts and techniques in real world financial scenarios

Course Content

Role of Treasury in Companies - Influences on Treasury Managers - Treasurer and Controller Defined - Treasury Organization - Treasury Information System.

Working capital management involving inventory receivables and cash - Management of Short term Debt instruments like Commercial paper - Certificate of deposits, treasury bills.

Capital Market Instruments - Debentures - Shares. Placements - Long term financing - Leasing - Hire purchase - Installment sale. Investments in Inter - Company Deposits, shares Government Securities - Bonds and in subsidiary companies.

Definition of risk - Process of risk management - Risk mitigation - Derivatives - Derivative products and their pricing - Risk management through derivatives.

Forex Markets an Overview - Exchange Rates - Forex Risks - Forex derivatives like Forward, future, Swaps, Options - Futures Exposure Management - Overseas Borrowing.

References

1.	Pathak Bharathi V, The Indian Financial System, 3rd edition, Pearson Education, Chennai (2008).
2.	Pandey I M.,Financial Management, 11th edition, Vikas Publishing House Pvt.Ltd, New Delhi (2018).
3.	Apte P G, International Financial Management, 7th edition, Tata Mcgraw Hill, New Delhi (2014).
4.	Srivatsa Rajiv., Derivatives and Risk Management, 2nd edition, OUP India, New Delhi (2014).
5.	Zvi Bodie, Alex Kane, Alan Marcus and Pitabas Mohanty Investments, 8th edition, Tata Mcgraw Hill, New Delhi (2009).
6.	Collier P A, Terry Cooke and John Glynn, Financial and Treasury Management. CIMA, Hienemanri Professional Publishing, London, (2002).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To demonstrate an understanding of the role and function of treasury management in corporate finance.
CO2	To Identify and evaluate different financial instruments and techniques used in treasury management.
CO3	To gain skills in cash management, foreign exchange management, and risk management.
CO4	To analyse and interpret financial data to make informed decisions in treasury management and to apply treasury management concepts and techniques to real world financial scenarios.

Course Code	:	MB863
Course Title	:	International Finance
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To introduce students to the complexities of global financial markets.
CLO2	To provide students with an understanding of the international monetary system and foreign exchange markets.
CLO3	To familiarize students with the management of foreign exchange risk.
CLO4	To enable students to develop the skills required for evaluating global investment opportunities.

Course Content

Global Economy - Financial Globalization - Financial Goals - International monetary system Current multinational financial challenges - Experiences from India - Openness of Indian Economy - Indicators.

Evolution of foreign exchange market and foreign exchange System - Brief introduction to currency systems - Balance of Payments - Market participants - A model of foreign exchange markets interest parity - Interest rates and exchange rates - Fixed vs Fluctuating Exchange Rates - Private World Money - Eurocurrencies.

Kinds of Foreign Exchange exposures - Transaction exposure and its measurement operating exposure - Sources - Measurement and difficulties associated with the measurement - Impact - Translation Exposure - Transaction and Economic Exposure vs Translation exposure.

International Trade and Risk Associated with International Trade - Introduction to different types of trade risk - Credit risk, Carriage Risk, Currency Risk, Country risk - Measuring risk exposure - Devices - Payoffs to risk management.

Sourcing Debt/Equity Globally - Cost of capital - Optimal financial structure - Exchange Control Regulations - Export Credit Guarantee Corporation - Exim Bank - Foreign Exchange Dealers' Association of India - Recent Developments.

References

1.	Eiteman David, Stonehill Arthur and Moffett Michael, Multinational Business Finance, 15th edition, Pearson education, Chennai, (2021).
2.	Levi, Maurice D. International Finance. 6th edition, Routledge, (2018).

3.	Buckley, Adrian, and Mark Casson. The Future of Finance: The LSE Report. 1st edition, Routledge, (2021).
4.	Madura, Jeff. International Financial Management. 13th edition, Cengage Learning, (2018)
5.	Shapiro Alan, Moles Peter and Kumar Jayanta Seal, International Financial Management, Wiley India, (2016).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop an understanding of international financial markets and its instruments.
CO2	To understand exchange rate mechanisms, currency risks, and their management.
CO3	To acquire knowledge of international financial institutions and their roles through which develop skills to analyse and evaluate global investment opportunities.
CO4	To understand the regulatory framework of global financial markets.

Course Code	**:**	MB864
Course Title	**:**	Corporate Valuation
Type of Course	**:**	PE
Prerequisites	**:**	None
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide students with an understanding of corporate valuation techniques and their applications
CLO2	To teach students the various methods of valuing a company and their suitability for different types of businesses
CLO3	To familiarize students with financial statement analysis and the role it plays in corporate valuation
CLO4	To enable students to critically evaluate the strengths and weaknesses of different valuation techniques and apply them to real world scenarios.

Course Content

The Role of Valuation - Principles of valuation - Definition of Standard of value (basis of valuation) - Fair Market value - Fair value - Investment value - Intrinsic value - Basics of Risk - Ethical Issues.

Discounted cash flow (DCF) approach – Measuring earnings – From earnings to cash Flows – Estimating growth – Estimating terminal value – Dividend discount model – Free cashflow to equity discount models – Adjusted present value – Estimating equity per share – Sensitivity analysis – Scenario analysis - Simulation

Relative valuation approach - Price to Equity (PER) and PEG - Price to book - Price to sales - Price to cash flow - Enterprise value to EBITDA - Income approach - Earning capitalization - EVA (Economic Value added) - Asset Approach - Valuation of Options - Selection of valuation approach - Assigning weight to Approaches Theory and Practice.

Categories of Financial Service Firms - Unique Features - Regulations - Cashflows - Cashflow to Equity Models - Asset based models - Choices - Valuing Private Equity.

Background - Classification of mergers and acquisitions - Processes and steps in Mergers and Acquisition Activities - Motives - Synergy effects - Theory and empirical evidence from Indian markets.

References

1.	Ashwath Damodaran, Valuation, 2nd edition, Wiley India (2011).
2.	"Valuation: Measuring and Managing the Value of Companies" by McKinsey and Company, Tim Koller, Marc Goedhart, David Wessels, (2021).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand and apply various methods of valuing a company, such as discounted cash flow analysis, relative valuation, and asset-based valuation.
CO2	To conduct financial statement analysis to determine a company's financial health and performance.
CO3	To evaluate the strengths and weaknesses of different valuation techniques and choose the appropriate method for a given business.
CO4	To apply corporate valuation techniques to real world scenarios and make informed decisions based on the results.

Course Code	**:**	MB865
Course Title	**:**	Financial Risk Analytics
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	Equip students with knowledge on various risks associated with the financial industry
CLO2	Understand and solve risks pertaining to the stock market and its instruments
CLO3	Analyse legal issues affecting business and manage risks effectively.

Course Content

Understanding risk - Nature - Sources - Need for Risk Management - Benefits - Risk Management Approaches Risk Classification - Credit Risk - Market Risk - Operational Risk and other Risk.

Measurement of Risk - Credit Risk Measurement - Market Risk Measurement - Interest Rate Risk Measurement - Asset Liability Management and Measurement of Operational Risk.

Managing Credit Risk - Operational Risk - Market Risk - and Insurance.

Tools for Risk Management - Derivatives - Combinations of Derivative Instruments - Neutral and Volatile Strategies - Credit Derivatives - Credit Ratings and Swaps.

Other Issues in Risk Management - Regulatory Framework - Basel Committee - Legal Issues - Accounting Issues - Tax Issues - MIS and Reporting - Integrated Risk Management.

References

1.	Vipul Prakashan, Rekha Shinde, and Sandhya Kulkarni, Vipul Prakashan, Financial Risk Management, (2022).
2.	John C. Hull and Sankarshan Basu, Risk Management and Financial Institutions, Wiley India Pvt. Ltd. (2021).
3.	Aswath Damodaran, Strategic Risk Taking: A Framework for Risk Management, Pearson Education India (2017).
4.	Dun and Bradstreet, Financial Risk Management, TMH, (2006).
5.	John C Hull , Risk management and Financial Institutions, Wiley, (2015).
6.	Financial Risk Manager Handbook by Philippe Jorion and GARP (Global Association of Risk Professionals), Wiley India Pvt. Ltd, (2019).
7.	Kannadasn. M, Fixed Income Securities: Valuation and Risk Management, Cengage, (2022).
8.	Fabrice Douglas Rouah and Gregory Vainberg, Financial Risk Analytics: A Term Structure Model Approach for Banking, Insurance, and Investment Management, Wiley India Pvt. Ltd, (2019).
9.	Joël Bessis, Risk Management in Banking, Wiley India Pvt. Ltd, (2015).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the different types of risks involved in the finance industry and their sources.
CO2	To analyze and manage credit, market, and operational risks using various tools and techniques.
CO3	To evaluate and measure risks in financial instruments such as derivatives, swaps, and credit ratings.
CO4	To explain the regulatory framework and legal issues involved in risk management through which the students will be able to implement integrated risk management strategies for businesses.

Course Code	:	MB866
Course Title	:	Introduction to FinTech
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To trace the evolutionary journey of financial technology
CLO2	To explain the impact of financial technology on financial services
CLO3	To provide an understanding of the technical intricacies of financial technology
CLO4	To take stock of the technological trends sweeping the financial services sector

Course Content

Introduction to Fintech- Evolution- Infrastructure for requirement for startups and Emerging Markets-Importance of FinTech-Global FinTech Investment-Main FinTech Hubs

FinTech in Payment Industry-Multichannel digital wallets-applications supporting wallets - onboarding and KYC application-FinTech in Lending Industry- Formal Lending-Informal lending- P2P lending- POS lending- Online lending- Payday lending- Microfinance- Crowdfunding.

FinTech in Wealth Management Industry-Financial Advice- Automated investing- Socially responsible investing- Fractional Investing- Social Investing. FinTech in Insurance Industry- P2P insurance- OnDemand Insurance.

Artificial Intelligence in Fintech- AI-driven Fraud Detection- Personalized Financial Services- Automated Trading Systems- Blockchain Technology - Blockchain Fundamentals- Cryptocurrencies and Digital Assets.

Global evolution of Fintech in Emerging markets- Regulatory and Policy Assessment for Growth of Fintech. Fin Tech as disruptors- financial institutions collaborating with FinTech companies- The new financial world.

References

1	Sanjay Phadke - Fintech Future: The Digital DNA of Finance Paperback. Sage Publications (2020).
2	Parag Y Arjunwadkar - FinTech: The Technology Driving Disruption in the financial service industry., CRC Press (2018).
3.	Pranay Gupta- T. Mandy Tham. Fintech: The New DNA of Financial Services . De Gruyter Publications,UK (2018).
4.	Yves Hilpisch., Artificial Intelligence in Finance: A Python-Based Guide., O'Reilly Media, Inc (2020).
5.	Lorne Lantz, Daniel Cawrey., Mastering Blockchain: Unlocking the Power of Cryptocurrencies, Smart Contracts, and Decentralized Applications., O'Reilly Media, Inc (2020).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To examine the evolution of the financial technology industry
CO2	To relate how financial technology is reshaping financial services
CO3	To Illustrate the technical know-how of financial technology
CO4	To demonstrate the current global landscape of financial technology Industry (Fintech)

Operations Management

Course Code	**:**	MB871
Course Title	**:**	Production Planning & Control
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To extend the knowledge gained in POM Course
CLO2	To formulate the business operations problem
CLO3	To understand production facility design

Course Content

Introduction to Capacity Planning – Long range capacity planning process – Measuring Capacities – Evaluating Capacity Alternatives – Economics & Diseconomies if scale.

Intermittent demand planning – Costs in creating aggregate plans –Strategies for Aggregate Planning – Formulation of aggregate plants – Policies for creating aggregate plan.

Introduction to Scheduling – Designing a Product Layout (Line Balancing Problem) – Designing a process layout (Job shop) – Johnson's rule - Priority rules – Heuristic approaches to solving the Scheduling ID.

Master Production Schedule (MPS) – Materials Requirement Planning (MRP) – Solving the MRP problem – Overview of JIT, MRP-II

Introduction to Product and Service Design – Factors affecting product design – Phases in product design – Importance for product design/ redesign – Difference between product design and service design

References

1.	"Quantitative Models in Operations and Supply Chain Management" by G. Srinivasan, PHP Learning Pvt. Ltd (2018).
2.	"Operations Management" by William J Stevenson, McGraw Hill Education, 11e Indian Edition (2015)
3.	"Operations Management: Theory and Practice" by B. Mahadevan, Pearson, Third Edition (2020)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the sequential planning process in operations decision making
CO2	To address the problems of locating, designing, planning and production of production facilities
CO3	To prepare basic production reports

Course Code	**:**	MB872
Course Title	**:**	Logistics Management
Type of Course	**:**	PE
Prerequisites	**:**	NA
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To create an understanding about the concepts of logistics and distribution management and their applications in the real-life situation
CLO2	To enable students, understand the route optimization, automation and so on which help in setting a benchmark in green and sustainable logistics.

Course Content

Definition, objective of logistics and the concepts of logistics, 7Rs of Logistics, Logistics Activities: Functions of the logistics system – transportation, warehousing, consolidation, distribution and information handling.

Inbound Logistics, Outbound logistics, Facility location, Classical location problems, Strategic planning models for location analysis, location models

Distribution management in a supply chain - direct shipment, cross docking, push-pull systems, variants of transportation models – Transshipment model, shortest path model, Maximum Flow model, Minimum cost flow models

7Cs of Logistics – Impact of supply chain contracts, Newsvendor Model, Decisions under uncertainty, risk pooling effect

Third party, and fourth party logistics, Airline Schedule Planning, Healthcare Logistics and other service industries

References

1.	David Bloomberg, Stephen LeMay, Joe Hanna: Logistics, Prentice Hall. ISBN: 013010194X (2001).
2.	Thomas Teufel, Jurgen Rohricht, Peter Willems: SAP Processes: Logistics, Addison-Wesley,. ISBN: 0201715147 (2002).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To learn about the basic logistics activities and concepts such as transportation warehousing and distribution and how these activities contribute to the overall supply chain strategy
CO2	To apply logistics concepts and principles to practical situations and solve problems related to logistics and supply chain management
CO3	To apply these skills and knowledge to optimize logistics activities and create value for the organization contributing to its success

Course Code	**:**	MB873
Course Title	**:**	Supply Chain Management
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To introduce the concept of "Supply Chain Management" and its importance in business models
CLO2	Students should be able to distinguish "Production Management" from "Operations Management"
CLO3	To understand the importance and impact of Inventory Decision Problems

Course Content

Fundamentals of Supply Chain Management, Decision phases in s supply chain, Pull-Push process. Overview of supply chain models and modelling systems. Non-seasonal demand forecasting.

Supply chain strategies, Achieving strategic fit, value chain, Supply chain drivers and obstacles, Strategic Alliances and Outsourcing, purchasing aspects of supply chain, Supply chain performance measurement: The balanced score card approach, Performance Metrics. Planning demand and supply: Demand forecasting in supply chain, Aggregate planning in supply chain, Predictable variability.

Planning and managing inventories: Introduction to Supply Chain Inventory Management. Inventory theory models: Economic Order Quantity Models, Reorder Point Models and Multi echelon Inventory Systems, Relevant deterministic and stochastic inventory models and Vendor managed inventory models.

Distribution Management: Role of transportation in a supply chain -direct shipment, warehousing, cross-docking; push vs. pull systems; transportation decisions (mode selection, fleet size), market channel structure, vehicle routing problem. Facilities decisions in a supply chain. Mathematical foundations of distribution management, Supply chain facility layout and capacity planning,

Role of Pricing and Revenue Management in a Supply Chain; Pricing and Revenue Management for Multiple Customer Segments; Pricing and Revenue Management for Perishable Assets; Pricing and Revenue Management for Seasonal Demand; Pricing and Revenue Management for Bulk and Spot Contracts. Role of IT in Pricing and Revenue Management

References

1.	"Supply Chain Management: Strategy, Planning, and Operation" by Sunil Chopra and Peter Meindel, Prentice Hall of India, 5th Edition (2013).
2.	R.B. Handfield and E.L. Nochols, Jr. Introduction to Supply Chain Management. Prentice Hall, (1999).
3.	Jeremy F. Shapiro. Modeling the Supply Chain. Duxbury Thomson Learning, (2001)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the business operations
CO2	To identify and solve problems relating to supply chain management
CO3	To solve industry problems

Course Code	:	MB874
Course Title	:	Service Operations Management
Type of Course	:	PE
Prerequisites	:	NA
Contact Hours	:	30 sessions
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To create an understanding on different service operations methods practiced in operations management.
CLO2	The Objective of the course is to understand the growing significance and impact of services on the growth and economy and the scientific ways to run the operations, so as to optimize the business and brand returns.
CLO3	Implementing service strategies: This involves exploring different service strategies such as service quality customer satisfaction service innovation and service recovery

Course Content

Introduction to service operations - the service concept; Service Package - Changing paradigms in the competitiveness of services; -Services and Manufacturing Continuum.

Developing a service strategy - Service positioning and implications for service delivery design - Service enhancement using Internet - Pricing strategies in services.

Effect of virtual and psychological ownership on services - Framing of services to influence customers - Nudging of services - Introduction to services supply chain.

The role of quality as a driver in services - Customer satisfaction and delivery of services - Quality improvement methods - Critical success factors of service quality - Measurement and management of quality - Consultation and change management - The marketing function identifying customer expectations.

Performance measurement and management - Linking operations decisions to business performance - Driving operational improvement - Developing service strategy.

References

1.	Robert Johnston and Graham Clark ‘Service Operations Management’ 3rd Edition Prentice Hall (2008).
2.	Nevan Wright and Peter Race ‘Management of service operations’ 2nd Edition Cengage Business Press (2004).
3	Slack N. Chambers S. and Johnston R. ‘Operations Management’ Prentice Hall (2004)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To apply the key principles tools and techniques of service operations management to design plan and manage efficient and effective service delivery processes.
CO2	To analyze service operations identify opportunities for improvement and develop appropriate strategies to enhance service quality customer satisfaction and profitability.
CO3	To evaluate different service delivery channels manage service capacity and demand and apply relevant performance metrics to monitor and control service operations.

Course Code	**:**	MB875
Course Title	**:**	Advanced Materials Management
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To create an understanding about the principles of inventory and material management
CLO2	To provide students with advanced knowledge, skills, and tools to effectively manage materials
CLO3	To Learn about policies, standards, procedures and practices of materials management

Course Content

The role of Materials Management in Business-Purchasing Purchasing -Role in Business Purchasing and Quality Sources of Supply.

International Buying - Importance - Global sourcing - Global Trading - Green purchasing - Supply Chain Management - EXIM Policy - Exchange Rate Management - Forward Contracts - INCOTERMS - Contracts and Pricing Practices - Negotiation -Purchase Timing - Make or Buy - Capital Equipment Purchase - Sourcing of Projects.

Strategic Material Planning - Materials Budgeting - Inventory Management - Approach to System Design.

Stores and Transportation - Stores Management - Insurance - Sales Tax - Transportation Marine Insurance.

Policies - Standards and practices - Procedures.

References

1.	Gopalakrishnan P. and Sundaresan M., 'Materials Management: An Integrated approach', TMH., New Delhi. (2004)
2.	Richard J.Tersine, 'Principles of Inventory and Materials Management' – Prentice hall. Interms (1990).
3.	Brown, R., Brown, V. C. M., Basler, P., and Gene, S.. Materials Management. New York. (1977)
4	Arnold, J. T., and Chapman, S. N.. Introduction to materials management. Pearson Education India. (2004)
5	Gopalakrishnan, P., and Haleem, A.. Handbook of materials management, PHI. (2015)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop analytical skills to critically analyze and evaluate complex materials management scenarios, identify problems, and apply advanced tools and techniques to solve them.
CO2	To gain an in depth understanding of advanced concepts, theories, and principles related to materials management.
CO3	To effectively manage inventory by utilising selective inventory strategic policies

Course Code	**:**	MB876
Course Title	**:**	Advanced Operations Research
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To create an understanding on advanced operational techniques in operations management
CLO2	To apply mathematical techniques and algorithms to real world scenarios in various fields such as finance, healthcare, manufacturing, and transportation.
CLO3	To develop skills in interpreting and communicating results, selecting appropriate tools, and critically analyzing the assumptions and limitations of the models.

Course Content

Make or Buy decision models - Inventory Management models - Financial Planning models - Marketing Research models - Work force assignment models.

Introduction to sensitivity analysis - Maximization and Minimization problems - Shadow Price - Reduced Cost - Simultaneous change of Inputs using 100% rule.

Introduction to Data Envelopment Analysis - Efficiency Frontier - Constant returns to scale and Variable returns to scale - Goal programming.

Introduction to Nonlinear program - constrained and unconstrained non-linear models- Lagrange multiplier - Khun tucker conditions.

Introduction to Markov chains - Chapman Kolmogorov Equation- Applications of Markov Analysis - Markov Decision Models.

References

1.	G. Srinivasan., “Operations Research Principles and Applications”, PHI, (2010).
2.	Thomas M. Cook and Robert A.Russell, ‘Introduction to Management Science’, Prentice Ha1l, 3rd Edition (1993).
3.	Hiller, F., & Hiller, M. Introduction to management science: a modeling and case studies approach with spreadsheets (5th ed.), New York, McGraw Hill (2003)
4	William E. Pinney and Donald B.McWilliams, ‘Management Science: An introduction Quantitative Analysis for management’, Harper & Row Publishers, 2nd Edition, (1987).
5	Anderson, D.R., Sweeney, D.J., Williams, T.A. and Martin, K., An Introduction to Management Science: Quantitative Approach to Decision Making, 13th Edition, SouthWestern, (2012).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To apply advanced principles and techniques of operations research to identify and solve complex optimization problems in various fields such as transportation, manufacturing, supply chain, and healthcare.
CO2	To use linear, nonlinear, integer, and dynamic programming, queueing, decision making, and simulation models to optimize processes, increase efficiency, reduce costs, and improve overall performance.
CO3	To equip with the necessary skills and knowledge to work in various industries and organizations as operations research analysts, management consultants, data analysts, or supply chain analysts.

Course Code	**:**	MB877
Course Title	**:**	Technology Forecasting
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To create an understanding about technology management and decision forecasting
CLO2	Understand the impact of forecasting on decision making through case studies.
CLO3	Develop skills in assessing and managing technological change including impact assessment benefit/cost analysis and risk analysis.

Course Content

Introduction - Importance of Technology Forecasting - Foresting Process - Types of Forecasting Methods.

Quantitative Methods - Trend Extrapolation - Qualitative Approaches - Growth Curves Envelop Curves - Substitution Model.

Qualitative Methods - Monitoring - Network Analysis - Scenarios - Morphological Analysis - Relevance Trees - Delphi Method - Cross Impact Analysis.

Forecast Impact on Decision Making - Forecasting uses through cases.

Assessment to Manage Technological Change - Impact Assessment - Analysis of Impact of technologies - Benefit/Cost and Risk analysis.

References

1.	Alan L. Porter, A. Thomas Roper, Thomas Wimason, Jery Banks and Fredrick A. Rossini 'Forecasting and Management of Technology' 2nd Edition, John Wiley (2011).
2.	Firat A. K. Woon W. L. and Madnick S.,. Technological forecasting A review. Composite Information Systems Laboratory (CISL) Massachusetts Institute of Technology 1 19. (2008)

3.	Coates V. Farooque M. Klavans R. Lapid K. Linstone H. A. Pistorius C. and Porter A. L.. On the future of technological forecasting, Technological forecasting and social change 67(1). (2001)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand about technology forecasting and its impact on decision-making.
CO2	To explain various quantitative and qualitative forecasting methods and develop skills in assessing and managing technological change.
CO3	To make informed decisions based on technology forecasting and its impact on their organizations.

Course Code	**:**	MB878
Course Title	**:**	Manufacturing Strategy
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To create an understanding about the concepts and principles of strategies of manufacturing
CLO2	To apply principles and techniques in the identifiable formulation and implementation of manufacturing strategy for competitive in global context
CLO3	To equip students with the tools and techniques to analyze manufacturing processes systems and technologies

Course Content

Introduction to manufacturing strategy - corporate strategy - Developing a manufacturing strategy - principles and concepts - Order winners and qualifiers.

Time the new source of competitive strategy - Gaining competitive advantage -Benchmarking - Lean manufacturing - Quality - Six Sigma - TQM.

Focus of manufacturing decisions relating to capability - flexibility - product variety inventory - supplier relationships.

Focused manufacturing - principles and concepts - managing the supply chain - green manufacturing - Process choice - Technology Strategy - virtual manufacturing - product profiling.

Interface of marketing and manufacturing - Make or buy - Outsourcing F- global manufacturing and global distribution.

References

1.	Narayanan V. K. “Managing Technology and Innovation for Competitive Advantage” Pearson Education Inc. (2001)
2.	Korgaonkar M. G. “Just In Time Manufacturing” MacMillan Publishers India Ltd. (2000)
3.	Sahay B. S. Saxena K. B. C. Ashish Kumar “World Class Manufacturing” MacMillan

	Publishers. (2013)
4	Hill and Terry, 'Manufacturing Strategy', 3rd. Edition, Richard D. Irwin Inc. (1999)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the concept and the importance of manufacturing strategy for industrial enterprise competitiveness.
CO2	To identify formulation and implement strategies for manufacturing and therefore enterprise competitiveness
CO3	To evaluate and identify the strengths weaknesses opportunities and threats (SWOT analysis) of the manufacturing sector

Course Code	**:**	MB879
Course Title	**:**	Supply Chain Analytics
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To expose students to the tools and techniques in analytics
CLO2	To enable students to apply analytics to solve business problems
CLO3	To enable analytical thinking in students
CLO4	To ensure hands on implementation of analytics models

Course Content

Introduction to Time Series – Moving Average Models – Auto Regressive Models – Integration – ARIMA (p,d,q) Models – R-Software implementation of the models. Croston Model for Intermittent Demand.

Linear Programming (LP) formulation for resource allocation problems – Data Envelopment Analysis – Conjoint Analysis – Case study solution in Python for a resource allocation problem.

Introduction to Dynamic Programming – Sequential Decision Making – Markov Models – Solving the Deterministic Dynamic Inventory Problem using Markov Models – Solving the Stochastic Dynamic Inventory Problem using Markov Models.

LP formulation of the Travelling Salesman Problem (TSP) – LP formulation of the Vehicle Routing Problems (VRP): Single Depot & Multi Depot – Heuristics for Chinese Postman Problem (CPP) – Python implementation of LP formulations of TSP and VRP.

Introduction to Heuristic Techniques – Genetic Algorithm (GA) – Simulated Annealing (SA) – Implementation of GA and SA for TSP and VRP in Python.

References

1.	*"Quantitative Models in Operations and Supply Chain Management",* by G. Srinivasan, PHP Learning Pvt. Ltd.
2.	*"Time Series: Theory and Methods"* by Peter J. Brockwell, Richard A. Davis, Springer Series in Statistics
3.	*"Markov Decision Processes"*, by Martin L. Puterman, Wiley Interscience

Course Outcomes (CO)

At the end of the course student will be able

CO1	To model time series data
CO2	To solve dynamic inventory problems and transportation network problems
CO3	To implement heuristic solutions for NP Hard problems

Course Code	**:**	MB880
Course Title	**:**	Lean Manufacturing
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide insights to the spirit of TPS and the process involved in a Lean Journey.
CLO2	To gain ability to implement lean principles in real world settings.
CLO3	To Learn the tools and techniques for measuring and analyzing business processes to identify and eliminate waste.

Course Content

TPS and Lean Foundation - History of Manufacturing - Introduction to The Toyota Way Lean Thinking.

Define Value - Value vs Waste - The 3 Ms - Identify Value Stream - Value Stream Mapping - Lean Diagnostic Tools.

Create Flow - Waste elimination - Single Piece Flow - SMED Enable Pull - Heijunka load leveling - JIT and Kanban.

Sustain Flow - Problem Solving - Problem solving journey - Jidoka and poka yoke - Sustain Flow - Equipment Reliability - Autonomous Maintenance - Planned Maintenance.

Standardize Processes - Standards - 5S and Visual management - Building Culture of Continual Improvement - Synchronize support processes - Kaizen philosophy.

References

1.	Womack J. P. and Jones D. T. "Lean thinking -banish waste and create wealth in your corporation" Journal of the Operational Research Society, 48(11), 1148. . (1997)
2.	Liker J. K. and Morgan J. M., "The Toyota way in services: the case of lean product

	development. Academy of management perspectives" 20(2) 5 20. (2006)
3.	Rother M. and Shook J. "Learning to see: value stream mapping to add value and eliminate mud". Lean Enterprise Institute. (2003)
4	Masaaki Imai "Kaizen: The key to Japan's competitive success" McGraw Hill (1986).
5	Ronald G. Askin and Jeffrey B. Goldberg, "Design and Analysis of Lean Production Systems", John Wiley and Sons, (2003).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the fundamental principles of Lean manufacturing and how they apply to various industries and processes.
CO2	To learn to use tools and techniques such as 5S, VSM, RCA, and Kaizen to identify and eliminate waste.
CO3	To develop Skills in process improvement, waste reduction and continuous improvement.

Course Code	**:**	MB881
Course Title	**:**	Game Theory and Applications
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	Demonstrate awareness of game theories and their applications.
CLO2	Aims to develop the ability to taking decisions on zero sum games.
CLO3	Outline paradoxes and strategic manipulations and various game theory applications.

Course Content

Trees - Game Trees - Information Sets - Choice functions and Strategies - Choice Subtrees Games with Chance moves - Theorem on Payoffs; Equilibrium N tuples of Strategies - Normal Forms.

Saddle Points; Mixed Strategies - Row values and Column Value - Dominated rows and columns - Small Games - 2 x n and m x 2 games - Symmetric Games - Solving Symmetric Games.

Noncooperative Games - Mixed Strategies - Maximin Values - Equilibrium N - tuples of Mixed Strategies - A Graphical Method for Computing Equilibrium Pairs - Solution Concepts for Noncooperative Games - Battle of the Buddies - Prisoner's Dilemma, Another game Super games - Cooperative Games - Nash Bargaining Axioms - Convex Sets - Nash's Theorem Computing Arbitration Pairs.

Coalitions - The Characteristic function, Essential and Inessential Games - Imputations Dominance of Imputations - the Core, Constant Sum Games, A Voting Game - Strategic Equivalence - Equivalence and Imputations - Reduced Form - Classification of Small Games - Two Solution Concepts - Stable Sets of Imputations, Shapley Values.

Voting - Voting Rules - Paradoxes - Strategic Manipulations - Bargaining - Nash Bargaining Solution - Ultimatum game - alternating - offers game - Threat Points Bargaining Shares - Auction.

References

1.	Peter Morris, "Introduction to Game Theory" ,Springer Publications (1994)
2.	A Dixit, S. Skeath and D. Reiley, "Game of Strategy" ,W. W Norton and Co,4th Edition (2014).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To explain the fundamental concepts of game theories.
CO2	To examine how to utilize zero sum games.
CO3	To evaluate the paradoxes and strategic manipulations and various game theory applications.

Course Code	**:**	MB882
Course Title	**:**	Behavioral Operations Management
Type of Course	**:**	PE
Prerequisites	**:**	None
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives

CLO1	Understand the foundations of behavioural operations management (BOM).
CLO2	Analyse how cognitive biases affect operational decisions.
CLO3	Evaluate the role of human behaviour in supply chains, service systems, and project management.
CL04	Apply behavioural insights to improve operational performance.

Course Overview

This course examines how human behaviour influences operational decision-making and performance. It integrates concepts from operations management, psychology and behavioural economics to understand deviations from rational decision-making and their impact on operational systems. The course focuses on improving operational effectiveness by understanding cognitive biases, social influences, human factors, and behavioural interventions.

Course Content

Introduction to Behavioural Operations Management

Rationality versus Bounded Rationality - Foundations of Behavioural Decision Theory - Human Factors in Operations - Relationship between Operations Management, Psychology, and Behavioural Economics

Behavioural Decision Making in Operations

Bounded Rationality - Heuristics and Biases - Prospect Theory - Risk Perception and Risk-Taking Behaviour - Framing Effects in Operational Decisions - Escalation of Commitment – Behavioural aspects of Queue Management

Behavioural aspects of Services Operations

Customer Behaviour in Service Systems - Gamification of services - Employee Behaviour and Service Performance - Emotional Labour in Service Operations – Nudging the services - Customer Experience Management

Behavioural Project and Process Management

Behavioural Challenges in Project Management – Role of Preferences, Beliefs and perception on

the Decision-Making Process – Conflict Management – Continuous Improvement – Change Management in Operational systems

Emerging Trends in Behavioural Operations

Human-AI Collaboration in Operations - Behavioral Sustainability - Behavioral Resilience and Crisis Management - Supply Chain Disruptions and Behavioral responses Industry 5.0 and Human Centric Operations - Directions of Behavioral Operations Research

References

1.	Bendoly, E., Van Wezel, W., & Bachrach, D. G. (Eds.). (2015). *The handbook of behavioral operations management: Social and psychological dynamics in production and service settings*. Oxford University Press.
2.	Thaler, R. H., & Sunstein, C. R. (2021). *Nudge: The final edition*. Penguin.
3.	Ariely, D. (2008). Predictably irrational. *New York*, 67-88.

Course Outcome

At the end of the course student will be able to:

CO1	To explain the fundamental concepts, theories, and frameworks of Behavioural Operations Management and their relevance to operational decision-making.
CO2	To evaluate behavioural factors influencing supply chain coordination, service operations, project management, and organizational performance.
CO3	To apply behavioural theories and analytical techniques to diagnose and address operational inefficiencies arising from human decision-making.
CO4	To design evidence-based interventions, nudges, and managerial strategies to improve operational effectiveness, workforce performance, and customer experience.

Business Analysis and IT Consulting

Course Code	:	MB891
Course Title	:	Introduction to Business Analysis and IT Consulting
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To course provides the knowledge and necessary skills for carrying out business analysis in IT domain
CLO2	To course provide learning to create business value using various techniques associated with business analysis
CLO3	The course discusses the practical nuances of IT consulting
CLO4	The course teaches to arrive at optimised solutions for the IT problems

Course Content

Trends in IS offshoring emerging business models - Goal setting - business analyst strategic role - creating and maintaining business architecture - feasibility studies determining project scope - preparing business case - initial risk assessment - Define Business Need - Assess Capability Gaps Determine Solution Approach - Define Solution Scope - Define Business Case preparing decision package.

Plan Business Analysis Approach - Conduct Stakeholder Analysis - Plan Business Analysis Activities - Plan Business Analysis Communication - Plan Requirements Management Process - Manage Business Analysis Performance - selecting and prioritizing projects - launching new projects - tracking project benefits.

Prepare for Elicitation - Conduct Elicitation Activity - Document Elicitation Results Confirm Elicitation Results.

Prioritize Requirements - Organize Requirements - Specify and Model Requirements Define Assumptions and Constraints - Verify Requirements - Validate Requirements Manage Solution Scope and Requirements - Manage Requirements Traceability - Maintain Requirements for Reuse - Prepare Requirements Package - Communicate Requirements signoff.

Brainstorming - Business Rules Analysis - process modelling - Data Modeling Document Analysis - Functional Decomposition - Interface Analysis - Interviews Organization Modeling - Prototyping - Requirements Workshops - Root Cause Analysis - Scenarios and Use Cases - Sequence Diagrams - State Diagrams - Analytical Thinking and Problem Solving - Behavioral Characteristics - Business Knowledge - Communication Skills - Interaction Skills - Software Applications.

References

1.	Business Analysis Body of Knowledge, Ver. 3.0, International Institute of Business Analysis, (2015).
2.	H. Podeswa, The Business Analyst's Handbook, Cengage Learning, (2015).
3.	D. Paul, D. Yeates, J. Cadle, Business Analysis, 3rd Edition, British Informatics Society, (2014).
4.	Tony Morgan, Business Rules and Information Systems: Aligning IT with Business Goals, Addison Wesle

Course Outcomes (CO)

At the end of the course student will be able

CO1	To develop consulting framework for a given IT problem.
CO2	To understand the different stages of consulting waterfall methods and agile methods.
CO3	To apply appropriate techniques to develop IT frameworks.
CO4	To prepare a consulting protype for a given problem

Course Code	**:**	MB892
Course Title	**:**	Business Analysis and ITC in Marketing and Retail
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	The course provides the knowledge and necessary skills for carrying out business analysis in Marketing and Retailing.

CLO2	The course provides knowledge to carry out IT integration projects in Marketing and Retail domains.
CLO3	The course discusses the practical nuances of IT consulting in the area of Marketing and Retail
CLO4	The course teaches to arrive at optimized solutions for the IT problems in the area of Marketing and Retail

Course Content

Types of Retailers - Multichannel retailing - Customer buying behavior - Role of emerging IT - Overview of Retail Technology - CRM - Loyalty management - major IT products and service providers in Marketing and retail - case studies.

Store Operations concepts and practices and IT - Managing the store - In store operations and management Store layouts - Design and Visual merchandising - Customer service -choosing technology - Planogram (POG) - Tills: Cash counter - point of sale - work force management.

IT applications in Merchandising - managing the merchandise assortment - merchandise planning system - buying merchandise - order placing - ranging - retail pricing - retail communication mix - invoice planning.

Supply chain management and IT planning supply chain information systems - In bound and out bound logistics - Transportation - Distribution systems - Logistics - warehousing reverse logistics.

Scale economics - Network effect of Internet - Defining value in Internet - operations strategy for e-tailing - SCM in e-tailing - Drivers of cost - managing product returns - advantages of Social media - Internal laws in payments and taxes - case studies.

References

1.	G. Joshi, Information Technology for Retailing, Oxford University Press, (2009).
2.	Khurana, Information Technology for Retailing, McGraw Hill Publishing, (2010).
3.	Levy, B. A. Weitz and A. Pandit, Retailing management, McGraw Hill publication, Sixth edition, (2008).
4.	Business Analysis Body of Knowledge, Ver. 2.0, International Institute of Business Analysis, (2012).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To analyse the business analysis problem scenario in in Marketing and Retailing.
CO2	To have the knowledge to carry out IT integration projects in Marketing and Retail domains.
CO3	To apply appropriate techniques to develop IT frameworks in the area of Marketing and Retail
CO4	To prepare a consulting protype for a given problem in the area of Marketing and Retail

Course Code	**:**	MB893

Course Title	:	Business Analysis and IT Consulting in Banking and Financial Services
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	The course provides the knowledge and necessary skills for carrying out business analysis in Banking and Financial Services (BFS) domain.
CLO2	The course discusses the growing trends and IT developments in the Banking and Financial services domain.
CLO3	The course discusses the practical nuances of IT consulting in the area of BFS
CLO4	The course teaches to arrive at optimized solutions for the IT problems in the area of BFS

Course Content

Overview of financial instruments - Financial market - Financial statements - Introduction to banking - Retail banking - Deposit products - Retail channels - Instruments - Retail payments - E banking - evolution and growth - Sales and marketing - A schematic of a retail Bank.

Mortgages, other loans - Community Banks - Credit Unions and Building Societies- Farm Credit - Retail Lending Cycle - Introduction to Cards and payments - Overview of Credit card market - Major players - Recent developments - Introduction to Wholesale banking and Commercial Lending - Corporate lending process - Credit derivatives - Treasury services - Cash management - Trade finance - Payment network.

Introduction to Investment management - Investment management process - Different classes of Investment management firms - Introduction to Investment banks - Functions - Major investment banks - Divisions - Investment banking post economic crisis - Brokerage Underwriting - Floor of Exchange - Order types - Over the counter market - How does a brokerage firm look like? Market indices.

Custody - Securities marketplace - Trading and Settlement - Asset Servicing – Trading - Clearing - Settlement.

Concept of risk - Types of risk - Risk Management - Benefits of Corporate Administration.

References

1.	L. Harris, Trading and Exchanges: Market Microstructure for Practitioners, Oxford University Press, (2012).
2.	M. Hara, Market microstructure Theory, John Wiley, (2008).
3.	J. Keyes, Handbook of Technology in Financial Services, CRC Press, (1999).
4.	J. Keyes, Financial Services Information systems, Taylor and Francis, (2005).
5.	Business Analysis Body of Knowledge, Ver. 2.0, International Institute of Business Analysis, (2012).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To apply their skills for carrying out business analysis in BFS domain
CO2	To will evaluate growing trends and IT developments in the Banking and Financial services domain and frame appropriate strategies for given problem.
CO3	To apply appropriate techniques to develop IT frameworks in the area of BFS
CO4	To prepare a consulting protype for a given problem in the area of BFS

Course Code	**:**	MB894
Course Title	**:**	Business Analysis and ITC in Manufacturing
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	The course provides the knowledge and necessary skills for carrying out business analysis in Manufacturing and Operations.
CLO2	The course provides knowledge to carry out IT integration projects in Manufacturing.
CLO3	The course discusses the practical nuances of IT consulting in the area of Manufacturing
CLO4	The course teaches to arrive at optimized solutions for the IT problems in the area of Manufacturing

Course Content

Trends in manufacturing industry - growth and opportunities - Global competition emerging concept of global supply chains - Global sourcing of raw material / components reducing cycle times - increasing complexity in logistics - impact of industry consortiums new models of using IT manufacturing and SCM case studies.

Basics of ERP - vendors and modules - Context and developing business case for ERP ERP project formulation - selection of product and implementation partners - ERP implementation life cycle - CSF and Change management in ERP implementation - Manufacturing Execution System and their integration with ERP business system and other reporting systems.

Implementation strategies, MRP - Bill of Materials - Shop floor control - Sales configuration - Quality management - Purchase order management - Inventory management - production planning and control - Plant maintenance - case study.

BPR Fundamental concepts - BPR methodology - Tools and techniques - Implementation strategies - Relevance of BPR in ERP/SCM implementation - case studies

SCM in manufacturing industry - Supply chain concepts - Push and Pull scheduling Make or Buy strategy - SCM framework - Managing global SCM - SCM products and vendors - SCM selection and implementation - Integration with ERP and Internet based marketing systems.

References

1.	Alexis Leon, 'ERP: Enterprise Resource planning', Mc Graw Hill Education, 3rd Ed (2017).
2.	V. K. Garg and N. K. Venkitakrishna, 'Enterprise Resource planning', PHI, 2nd edition, (2003).
3.	V. Gover and W. J. Kettinger, Business Process Change Reengineering concepts, methods and technologies, Idea Publications, (1995).
4.	S. Chopra and P. Meindl, "Supply Chain Management Strategy, Planning and Operation", 6th edition, Pearson, (2015).
5.	Business Analysis Body of Knowledge, Ver. 3.0, International Institute of Business Analysis, (2015).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To analyse the business analysis problem scenario in Operations and Manufacturing domains.
CO2	To have the knowledge to carry out IT integration projects in Manufacturing domains.
CO3	To apply appropriate techniques to develop IT frameworks in the area of Manufacturing

Course Code	**:**	MB895
Course Title	**:**	Systems Analysis and Design
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	The aim of this course is to provide students with an opportunity to learn the basic knowledge (knowing) and skills (doing) to design an information system.
CLO2	The course will focus on the system development life cycle (SDLC), by examining in detail the stages of SDLC.
CLO3	To enable students work with CASE tools in support of analysis and design Phase

Course Content

Approach to System Analysis and design (SAD) - Methodology System development Life Cycle (SDLC) - Traditional model Prototyping - Joint Application Design - Rapid Application Development - Agile Methodologies - OOAD System development Activities Overview.

Identifying and Selecting System development Project - Corporate and information System Planning - Initiating and Selecting System development projects Process Assessing project feasibility - Building and reviewing Baseline Project Plan.

Requirements determination Methods - Structuring System Process requirements - Process modelling - DFDs and Use Cases - Structuring System Logic requirements - Logic Modeling Decision trees - Decision Table - OOAD - Sequence and Activity diagrams - Structuring System Data requirements - Conceptual Data modelling - E R model - Degrees and Cardinalities in relationships - Associative Entities - Supertypes and subtypes.

Designing databases - Relational DB model - Normalization - Transforming E R diagrams into Relations - Merging relations - Design of forms and reports - Finalizing design specifications.

System implementation - System Application Testing - Installation - Documentation Training and Support - Issue in System Implementation - Maintenance - Types of Maintenance Cost - Managing Maintenance.

References

1.	Hoffer, George and Valacich, "Modern Systems Analysis and Design", 7th Edition, Pearson Education, (2014).
2.	Joseph S. Valacich and Joey F. George, " Modern Systems Analysis and Design", 8th Edition , Pearson Education (2017)
3.	Dennis, B. Haley, D. Tegarde, "Systems Analysis and Design with UML", 4th Edition, John Wiley and Sons, (2012).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand stages of system development and to create framework to solve information systems problem
CO2	To analyze and develop process flow diagram (DFD's, E R) and logic diagram and Use Case using UML for system development
CO3	To write business document Plan and undertake a minor project, prepare and deliver structured written technical system development report using learned tools at class.

Course Code	**:**	MB896
Course Title	**:**	Software Project Management
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	The course has been designed for students to acquire a working knowledge of software project management methodologies, tools, and techniques with a focus on planning and monitoring SPM activities.
CLO2	To learn application of tools to facilitate the software project management process (e.g. Microsoft Project, CASE tools, and Cost estimation tools COCOMO, MTA…)
CLO3	To create an understanding on quality and risk issues in software project management

Course Content

Overview of SPM - SPM activities - Software Engineering Layers - SPM methodologies Common Process framework - People Process Technology Framework (PPT) - Project Planning: understanding Project scope and estimation - Software cost estimation - LOC

(COCOMO) and Function points - Preparing Project scheduling - Documenting a Plan Project Plan review and Execution - Monitoring and Controlling - PMBOK.

Scheduling Work Breakdown Structure (WBS) - Common Process Framework (CPF) Project Schedule preparation - Gantt Chart and Milestone Trend Analysis MTA - Network diagrams: PERT/CPM.

Monitoring and Control of Project planning - SCRUM - Earned Value Management (EVM) CV, SV, CPI, SPI - Metrics for error tracking - Project Review: Inspection - Desk checks, Walkthroughs - Code reviews - Pair Programming.

Software testing - Plans, Strategies and Validation - Software quality Attributes - Metrics and Indicators - Capability Maturity Model (CMM) - SQA activities - Quality standards and Certifications.

SCM: Baselines Plan for change, Change request Management Risk management Process Cost Benefit analysis - SPM Tools CASE Tools - MS Project - Cost estimation tools (COCOMO) - MTA.

References

1.	Royce, Walker, Software Project Management A unified Framework, 9th edition, Addison Wesley Professional, (2014).
2.	Kelker, S. A, Software Project Management: A Concise Study, 3rd edition, PHI, (2012).
3.	P. Jalote, Software Project management In Practices, Pearson Education India, (2016).
4.	Richard H.Thayer (Edited), "Software Engineering Project Management", IEEE, John Wiley and Sons, 2nd edition, (2006).
5.	B. Hughes, M. Cotterell, R. Mall, Software Project Management, 6th edition, McGraw Hill Education, (2017).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the process, methods, Measurements, quality, risk involved in Software project management.
CO2	To understand the scenario of operations of software industry in software development.
CO3	To work on s/w project planning, Scheduling, progress assessment and cost estimation using supporting tools to manage software projects (MS Project, CASE tools, MTA PROIT, COCOMO and so).

Course Code	**:**	MB897
Course Title	**:**	Software Quality Management
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	The course provides adequate knowledge to frame software project quality methods
CLO2	The course provides understanding on evaluation process, procedures and controls of

	software project quality.
CLO3	The course provides necessary skills needed to perform tasks to append the quality measures of the Software projects

Course Content

Vocabulary of quality in IT - Different views of quality - Quality concepts and practices - Quality Control and Quality Assurance - Quality Pioneers Approach to Quality - Quality Leadership - Leadership Concepts - Quality Management Infrastructure - Quality Environment.

Quality Baseline Concepts - Methods Used for Establishing Baselines - Model and Assessment Fundamentals - Industry Quality Models - Quality Assurance Establishing a Function to Promote and Manage Quality - Quality Tools Process Deployment - Internal Auditing and Quality Assurance.

Planning Concepts - Integrating Business and Quality Planning - Prerequisites to Quality -The Planning Process - Define Build Implement and Improve Processes - Process Management Concepts - Process Management Processes.

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

Principles and Concepts of Internal Control - Risk and Internal Control Model's Building Internal Controls - Building Adequate Security - Outsourcing, COTS andContracting Quality - Quality and Outside Software - Selecting COTS Software -Selecting Software Developed by Outside Organizations - Contracting for Software Developed by Outside Organizations - Operating for Software Developed by Outside Organizations.

References

1.	P. Jalote, CMM in Practice: Processes for Executing Software Projects at Infosys,Addison Wesley Longman Publishing, (2005)
2.	The Capability Maturity Model: Guidelines for Improving the Software Process, Carnegie Mellon Univ. Software Engineering Inst., Addison Wesley Professional, (1995)
3.	M. C. Paulk, C. V. Weber, B. Curtis and M. B. Chrissis, The Capability Maturity Model: Guidelines for Improving the Software Process, Carnegie Mellon University, Software Engineering Institute, Addison Wesley, (2007)
4.	D. Galin, Software Quality Assurance: From Theory to Implementation, Addison Wesley, (2003)
5.	M. Haug, E. W. Olsen, L. Consolini, Software Quality Approaches: Testing,Verification, and Validation: Software Best Practice, Springer, (2001)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To gain knowledge on concepts and best practices of Software quality management
CO2	To create quality metrics and frameworks to analyse project quality
CO3	To assess risk and define control measures for Software quality

Business Analytics

Course Code	:	MB911
Course Title	:	Introduction to Business Analytics
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To understand, fundamental techniques and tools of business analytics.
CLO2	To impart knowledge of data driven decision making, interpretation, analysis and visualization in different business contexts.
CLO3	To enhance students' critical thinking and problem-solving ability by enabling them to analyze large volumes of data and formulate effective business strategies.

Course Content

The nature of emerging business environment - Data as a strategic asset - analytical competition - embedding analytic in business process - Reporting / Descriptive Analytics, Modeling or Predictive analytics, Data Driven Strategies analytics and business performance - building analytical culture - Industry trends in analytics - review techniques and tools.

Basic concepts of database - Introduction to data warehouse - Characteristics of DWH OLTP Vs OLAP Databases - Fact Table Vs Dimension Table - Concepts of Schemas ETL and Reporting tools - Data Cleaning, Data Integration and Transformation, Data Reduction - implementing approaches for data warehouse - data marts - case studies.

The art and science of understanding business contexts - stages of enhanced analytics capabilities - defining metrics - categories and levels of metrics - defining KPIs - linking the strategic Outcomes and KPIs - use of KPI directories for different industry segments aligning technologies in the analytics domain - case studies.

Identifying core KPIs - Review of data analytics techniques choice of techniques - developing a hybrid model with specific tools - sourcing data - validating data and models using high level framework and integrating with tools - case studies.

Balanced scorecard and other performance management systems - Report design and development - Data visualization - Dashboard - Business Activity Monitoring - Case studies.

References

1.	Thomas H. Davenport; Jeanne G. Harris, Competing on Analytics: The New Science of Winning, (2007).
2.	Turban, Aronson, King, Sharda “Business Intelligence”, Pearson Publications, (2008)
3.	Analytics at Work: Smarter Decisions, Better Results Tom Davenport, Jeanne G. Harris, Robert Morison (February 2010).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To acquire skills in using analytical tools such as Excel, SQL, and R for analyzing big

	data, creating reports, and communicating insights
CO2	To develop proficiency in using software tools for data analysis.
CO3	To interpret and draw inferences from data analysis results.

Course Code	:	MB912
Course Title	**:**	Basic Data Analytics
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	Understand the basic concepts of data analytics and their application in business
CLO2	Analyze data using statistical methods and software tools
CLO3	Interpret the results of data analysis and make informed decisions based on them
CLO4	Develop and validate the hypothesis using data
CLO5	Use data to identify trends and patterns and make predictions

Course Content

Assumptions for General Linear Regression Model - Ordinary Least Squares Approach - measures of fit - statistical inferences - Hypothesis testing and interval estimation - Data cleaning - Outliers and influential observations

Dummy regressions and conjoint analysis - multi collinearity - Logistic regression Grouped Data - Weighted Least Square (WLS) - Individual Data - Newton Raphson method - Error rate estimation

Introduction - Two Group problem - Variable contribution - The case of discrete Variables

The K groups problem - Error rate estimate in multiple groups - Interpretation of multiple discriminant analysis solution - step wise selection of variables.

The basic model - Extraction of factors - Principal factor - maximum likelihood method factor rotation - orthogonal - oblique rotations - Factor score - interpretations of factor analysis solutions.

References

1.	Damodar N. Gujarati, 'Basic Econometric' Tata McGraw Hill, 5 ed. 2009.
2.	Naresh K Malhotra, 'Marketing Research' Pearson Prentice Hall, 7 ed. 2019.
3.	Ravindra Khattree and Dayanand N. Naik, 'Multivariate data reduction and Discrimination with SAS software' 1 st ed. 2000

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the fundamentals of data analytics including data types data sources and data structures
CO2	To utilize different statistical methods to analyze data and derive insights.
CO3	To create and interpret data visualizations using tools
CO4	To apply techniques for data driven decision making in various fields including business healthcare and social sciences.

Course Code	:	MB913
Course Title	**:**	Big Data Analytics and Data Science
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide the knowledge and necessary skills for taking up job roles in big data analytics.
CLO2	Determine suitable data analytics techniques for different business scenarios.
CLO3	Assess the applications of data science techniques in the field of management

Course Content

What is big data - Why big data matters - Big data and business case - Big data sources Machine data Vs Human generated data - drivers of big data - Analytic data sets - Big data dimensions - Volume, variety and velocity - Industry examples of big data - impact of cloud computing - Evolving concept of Data Science - learning from knowing - agility multidisciplinary focus scale and convergence leading to Data Science - Data Scientist How is a data scientist different from a Statistician.

The evolution of big data analytics - Look (Search, Indexing and Memory) - Listen (Streams, Information and Language, Analyzing Sentiment and Intent) - Learn (Classification, Clustering, and Mining, Information Extraction) - Connect (Reasoning: Logic and its Limits, Dealing with Uncertainty) - Predict: Forecasting, Neural Models, Deep Learning Collaborative filtering - Large graph analysis - Text mining - Volume Trending - Influencer Identification - In Memory Analytics.

Big data storage and computation - Massive Data Analytics: parallel algorithms - online learning algorithms - locality sensitive hashing - Hadoop and Map Reduce Paradigms - CAP Theorem - Introduction to NoSQL persistence layer and its importance to handle massive data - Types of NoSQL databases - Column family, Graph, Name value pairs etc - H base /Cassandra /Neo4js - Basic introduction to tools like R/Mahout/Giraffe - Building the big data capabilities - Security, compliance and auditing - data privacy and ethics.

Unsupervised feature learning and deep learning - Ontology - Similarity measures - Shingles and minhashing - Locality sensitive hashing, Dimension reduction - Streaming - Clustering in high Dimensional Space - Web link analysis - Graph search, etc.

Big data use cases in Digital Decoding consumer intent - decoding customer sentiments from comments - Big data use cases in Telecom and location - based intelligence marketing Applications in CPG - Big data use cases in Utility banking and financial services healthcare Internet retail.

References

1.	. F.J. Ohlhorst, Big Data Analytics: Turning Big Data into Big Money, Wiley, (2012)
2.	J. Liebowitz, Big Data and Business Analytics, CRC Press, (2013)
3.	M. Minelli, M. Chambers, and A. Dhiraj, Big Data Big Analytics, John Weily and Sons, (2013)
4.	J. Stanton, Introduction to Data Science, Syracuse University, (2013).
5.	Rajaraman, J. Leskovec and J. D. Ullman, Mining of Massive Data Sets, Cambridge University Press. (2011).
6.	T. Hastie, R. Tibshirani, J. H. Friedman, The elements of statistical learning: data mining, inference and prediction, Springer, (2009).
7.	K. Roebuck, Big Data: High impact Strategies, Lightning Source Incorporated, (2011)
8.	Franks, Taming the Big Data Tidal Wave, John Wiley and Sons, (2013)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To determine suitable data analytics techniques for different business scenarios.
CO2	To analyze the theories and methods of data analytics.
CO3	To assess the applications of data science techniques in the field of management.

Course Code	:	MB914
Course Title	**:**	Advanced Data Analytics
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	Understand and analyze complex data sets using advanced techniques such as statistical modeling
CLO2	Apply data analysis techniques to various business scenarios such as forecasting segmentation and customer behavior analysis
CLO3	Develop critical thinking and problem-solving skills necessary to interpret and communicate data insights to stakeholders
CLO4	Understand the ethical and legal implications of using data analytics in business and how to incorporate ethical considerations into their analytical practice

Course Content

Extracting Principal components - The geometry of principal components - deciding on how many components to retain - test of significance - component scores

Establishment of canonical variables - establishment of canonical loading and its interpretation -

Deriving cross loading and redundancy co-efficient and their interpretation.

Introduction - Proximities and Data collection - spatial map - metric nonmetric data - joint space analysis.

Naming and interpreting the dimension using canonical correlation - attribute based perceptual mapping using factor analysis - spatial map using preference data through internal analysis and external analysis.

Similarity measures - clustering techniques - hierarchical and partitioning methods graphical methods - assessing cluster solutions - implementation.

References

1.	Damodar N. Gujarati, 'Basic Econometric' Tata McGraw Hill, 5 ed. 2009.
2.	Naresh K Malhotra, 'Marketing Research' Pearson Prentice Hall, 7 ed. 2019.
3.	Ravindra Khattree and Dayanand N. Naik, 'Multivariate data reduction and Discrimination with SAS software' 1 st ed. 2000

Course Outcomes (CO)

At the end of the course student will be able

CO1	To gain proficiency in advanced statistical methods for analyzing complex data sets including regression analysis time series analysis and machine learning algorithms
CO2	To develop a deep understanding of data visualization techniques including the use of interactive dashboards and storytelling techniques to communicate insights from data analysis
CO3	To design and execute effective data collection and management strategies including the use of advanced survey methods
CO4	To develop critical thinking skills required for effective decision making based on data insights

Course Code	:	MB915
Course Title	**:**	Machine Learning Techniques
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	Understanding of the fundamental concepts and techniques used in machine learning
CLO2	Apply these techniques to real world problems analyze and interpret the results and communicate the findings effectively
CLO3	Strong foundation in statistical theory data preprocessing model selection and evaluation methods

Course Content

Introduction to Machine Learning Types Supervised Learning Unsupervised Learning. Neural Network Theoretical Background Feed Forward Network Back Propagation Transfer

functions and its types - List of Applications

Support Vector Machine - Margin Maximization - Primal and Dual form solving by using Quadratic programming Linearly separable case soft margin classifier - kernel trick kernel types - Linear polynomial - RBFT and Nonlinear SVM

Bayesian Classification - Bayes Theorem - Priori and posteriori Probabilities - Naive Bayes Classification - KNN Theoretical Background - Determination of 'k' Performance Measures for Supervised Learning Techniques - Confusion Matrix - Accuracy - Recall - Precision - F Measure - ROC AUC - Rand Index - Jaccard Index

Types of Data in Cluster Analysis - Clustering Methods - Partitioning Methods - K Means - K Medoids - Hierarchical Methods - Agglomerative and Divisive.

Grid Model Based Clustering Methods - EM algorithm - Self Organizing Map Statistical Information Clustering High - Dimensional Data - Clustering In QUEST - Projective clustering - Outlier Analysis

References

1.	T. Hastie, R. Tibshirani, J. Friedman, "The Elements of Statistical Learning" 2edition, Springer, (2008)
2.	Christopher Bishop, "Pattern Recognition and Machine Learning",2nd edition, Springer (2018).
3.	Jiawei Han and Micheline Kamber "Data Mining Concepts and Techniques" Morgan Kaufmann publication, (2006).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the foundations of Machine Learning such as statistical learning theory model selection and cross validation
CO2	To have a strong understanding of supervised and unsupervised learning techniques including decision trees random forests k Nearest Neighbors Support Vector Machines and clustering algorithms
CO3	To clean and preprocess data including handling missing data feature scaling and normalization

Course Code	:	MB916
Course Title	**:**	Advanced Machine Learning Techniques
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To examine the history and state of the art approaches to deep learning and hidden Markov models.
CLO2	To present the mathematical statistical and computational challenges of building stable representations for high dimensional data such as images text and data

CLO3	To learn and apply the evolutionary and swarm intelligence algorithms

Course Content

Decision Tree Induction C4.5 Random Forests and ID3 - Rule Based Classification Fuzzy Clustering Methods - Fuzzy set approaches - Fuzzy C Means - Possibilistic C Means - Fuzzy Possibilistic C Means - Possibilistic Fuzzy C Means

Introduction - Structure - Forward and backward algorithm - Viterbi algorithm Identification of best path and Sequence - Applications.

Deep Feed Forward Network Architectures - Gradient based Learning - Activation functions - regularizations and dropouts - Optimization for training deep models.

Convolutional Neural Network - Architectures - Convolution - Pooling - Recurrent Neural Network - LSTM GRU Encoder Decoder architectures - Deep Belief Network Architectures - RBN - Belief Nets.

Neighbourhood based Algorithms - Simulated annealing - Tabu search - Evolutionary algorithms - Genetic algorithms - Genetic programming and Differential evolution Swarm Intelligence - Ant colony optimization - Particle swarm optimization

References

1.	Bengio Yoshua Ian J. Goodfellow and Aaron Courville. "Deep learning" An MIT Press book in preparation, (2015).
2.	Bengio Yoshua. "Learning deep architectures for AI" Foundations and trends in Machine Learning, (2009).
3.	Jiawei Han and Micheline Kamber “Data Mining Concepts and Techniques” Morgan Kaufmann publication, (2006).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To Understand and apply advanced techniques for feature selection and feature engineering to enable effective machine learning models
CO2	To Build and deploy different types of deep learning models like CNNs and RNNs for image processing natural language processing and graphical data analysis
CO3	To Analyze and optimize machine learning models performance through model selection and validation techniques

Course Code	:	MB917
Course Title	**:**	Data Mining Techniques
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To explore the concepts and techniques for the discovery of patterns hidden in large data sets and the application of techniques in various domains to students
CLO2	To introduce students to various data mining techniques and their associated algorithms

CLO3	To help students learn how to prepare and preprocess data for effective data mining

Course Content

Concepts - Scope and Objectives Data mining process - Data mining functionalities - Data preprocessing.

Mining Frequent Patterns - Associations and correlations - Market Basket Analysis Efficient and scalable frequent item set mining methods - Mining various kinds of association rules - Association mining to correlation analysis - Constraint based association mining.

Concepts - Classification by decision tree - Bayesian classification - Rule based classification - Support vector machines - Associative classification - Lazy learners Prediction - Accuracy and error measures - Evaluating accuracy of a classifier and predictor - Ensemble methods - Model selection.

Cluster analysis - Partitioning methods - Hierarchical methods - Density based method - Grid based method - Model based clustering - Outlier analysis - Examples.

Data mining applications and cases using tools.

References

1.	Han, J and Kamber, Data mining concepts and applications", 4th Edition, Elsevier publications, (2022).
2.	Margaret H. Dunham, "Data Mining: Introductory and Advanced Topics", Pearson Education, First Indian Reprint, (2003).
3.	Weiss, S.M., Indurkhya, N., Zhang, T., Damerau, F, Text Mining, Predictive Methods for Analyzing Unstructured Information", Springer publications, (2005).
4.	Anthony Scime, Web mining: applications and techniques, Idea Group publications, (2007).
5.	Paolo Giudici, "Applied Data mining: Statistical methods for business and industry", John wiley and sons (2005).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To Understand the basic concepts and techniques of data mining and its application to various domains
CO2	To Analyze and preprocess data for effective data mining.
CO3	To Apply data mining tools and software to real world datasets and interpret the results.

Course Code	:	MB918
Course Title	**:**	Google Analytics
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To introduce various features and capabilities of Google Analytics.

CLO2	To provide a deeper understanding on the overview of analytics methodologies adopted by Google and for better understanding of customers and customization of channel.
CLO3	To analyze and interpret data from Google Analytics to inform business decisions.

Course Content

Google Analytics - set up dashboards and filters - The Google Analytics layout -Dashboards - Basic Reporting Tools - Audience - Acquisition and Behaviour reports.

Custom Campaigns measurement - Tracking campaigns with the URL Builder - Use of Goals to measure business Objectives - Google Ads campaigns measurement.

Data Collection using Google analytics - Categorizing into users and sessions - Storing data and generating reports - Creating a measurement plan - Set up advanced filters on views - Custom Dimensions and Custom Metrics - Understand user behaviour with Event Tracking.

Segment data for insight - Analyze data by channel audience and with Custom Reports - Best practices in doing for web analytics - case studies.

Traffic sources - Improve site engagement - KPIs for content site - pages helping conversions - Driving forces for product purchases - Basics of Google Analytics 360 Rollup Reporting.

References

1.	Feras Alhlou, Shiraz Asif, Eric Fettman, “Google Analytics Breakthrough, From Zero to Business Impact”, Wiley Publishing, (2016).
2.	Justin Cutroni, “Google Analytics”, O’Reilly Publishing (2010).
3.	Clifton, B, Advanced Web Metrics with Google Analytics”, Wiley Publishing, (2009).
4.	Peterson, E, “Web Analytics Demystified: A Marketer's Guide to Understanding How Your Web Site Affects Your Business”, Celilo Group Media and Café Press, (2005)

Course Outcomes (CO)

At the end of the course student will be able

CO1	To Understand the fundamental concepts of web analytics and how Google Analytics fits into the larger analytics ecosystem
CO2	To Create custom reports and dashboards in Google Analytics to meet specific business needs.
CO3	To Analyze and interpret data from Google Analytics to gain insights into website or app performance and user behaviour.

Course Code	:	MB919
Course Title	**:**	Text Analytics
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	Upon the completion of this course, the students would know the types of problems to be solved through Text Analysis.

CLO2	The students will understand different methods for Information extraction and classification.
CLO3	The course aims to provide knowledge on using Text for Prediction and learning different operators through hands on exercises in Python.

Course Content

How Text Differs from Numbers - Types of Problems Solved - Key Word Search - Nearest Neighbor Methods - Measuring Similarity - Web Based Document Search - Document Matching - Evaluation of Performance.

Setting up libraries and creating data sources and in SAS Text Miner - Introduction to different text mining nodes and their properties - Tokenization - Lemmatization - Vector Generation for Prediction - Part of Speech tagging - Word Sense Disambiguation - Phrase Recognition - Named Entity Recognition.

Recognizing Documents Fit Pattern - Document Classification - Methods used for Prediction from Text - Evaluation of Performance - Clustering Documents by Similarity - Cluster's Labels - Applications - Evaluation of Performance.

Different Levels of Analysis - Sentiment Lexicon and its issues - Natural Language Processing issues - Opinion Summarization - Sentiment Analysis.

Case studies on Social Network Marketing Application - Different issues to be considered for text and sentiment analysis.

References

1.	Dipanjan Sarkar, "Text Analytics with Python: A Practical Real World Approach to Gaining Actionable Insights from Your Data" (2018).
2.	Benjamin Bengfort, Rebecca Bilbro, and Tony Ojeda, "Applied Text Analysis with Python: Enabling Language Aware Data Products with Machine Learning" (2018).
3.	Thomas W. Miller, "Data and Text Mining: A Business Applications Approach" 1st Edition Publisher: Pearson
4.	G. Ignatow and R. Mihalcea, "Text Mining: A Guidebook for the Social Sciences", Sage Publishing.

Course Outcomes (CO)

At the end of the course student will be able

CO1	To apply creative problem-solving techniques for customer need analysis and arrive at innovative solutions
CO2	To understand different methods for Information extraction and classification
CO3	To know the Text for Prediction and basics of Python.

Course Code	:	MB920
Course Title	**:**	Digital Analytics
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide the knowledge and necessary skills for carrying out job roles in the domain of analytics in Internet based data.
CLO2	The course explores digital data analysis techniques and their theoretical foundations to help students acquire analytical skills that can be applied to real world problems.
CLO3	Compare and explain how to optimize social media analytics for products and services.

Course Content

Search analytics - Engagement quantification frameworks - Anonymous vs registered users' analysis - Search engine optimization.

Centrality - Tie Strength - Dyads - Social Capital / Structural Holes - Homophily - Online Communities - Community Detection - Diffusion in Networks.

User generated content - Sentiment Analysis - Network link analysis - Text mining from opinion platforms - Theme analysis - Overlaying text mining on segments.

Basic of DOE - Application of DOE to validate creative web design alternatives - Best practices in doing DOE for web analytics - case studies.

Promotional campaign (Ad gaming analysis) - The concept in brief applications in CPG/ Telecom and retail context - Mining promotion data for targeted campaigns - print and media Entertainment etc.

References

1.	Peterson, E. Web Analytics Demystified: A Marketer's Guide to Understanding How Your Web Site Affects Your Business, Celilo Group Media and Café Press, (2005).
2.	Clifton, B. Advanced Web Metrics with Google Analytics, Wiley Publishing, (2009).
3.	Ramos, A. and Cota, S. Search Engine Marketing, McGraw Hill Publishing, (2009).
4.	Chuck Hemann and Ken Burbary, Digital Marketing Analytics, 2nd Edition, Oearson Publication, (2019).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand how data function adds value and demonstrates the value in business management.
CO2	To compare and explain how to optimize the different social media analytics for products and services.
CO3	To assess the applications of digital analytics in the field of management.

Course Code	:	MB921
Course Title	**:**	Data Analytics Software Lab
Type of Course	**:**	PE
Prerequisites	**:**	Nil

Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To provide hands on exposure to various multivariate data analysis techniques using different software packages for managerial decision making.
CLO2	Develop and Impart data coding and regression techniques using data analytics software.
CLO3	Utilize the analytical tools for factor analysis and structural equation modelling.

Course Content

Data preparation and data coding - Overview of univariate - bivariate and multivariate data analysis techniques - Degree of Relationship among Variables - Screening Data Prior to Analysis - Missing Data - Outliers - Normality - Linearity and Homoscedasticity

Multiple Regression - Linear and Nonlinear techniques - Backward Forward Stepwise Hierarchical regression - Analysis of Variance and Covariance (ANOVA and ANCOVA) Multivariate Analysis of Variance and Covariance (MANOVA and MANCOVA) - Canonical correlation.

Logistic regression: Regression with binary dependent variable - Simple Discriminant Analysis, Multiple Discriminant analysis - Assessing classification accuracy - Conjoint analysis.

Principal Component Analysis - Factor Analysis - Orthogonal and Oblique Rotation - Factor Score Estimation - Multidimensional Scaling - Perceptual Map - Cluster Analysis.

Latent Variable Models an Introduction to Factor, Path, and Structural Equation Analysis.

References

1.	Malhotra, N. K., Marketing research: An applied orientation, Pearson Education India, (2008)
2.	Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L.. Multivariate data analysis, Pearson India (2013).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To explain the fundamental concepts of data preparation and coding.
CO2	To compare and explain how to use multiple and logistic regression.
CO3	To evaluate the data figures using factor analysis and structural equation modeling.

Course Code	MB922
Course Title	**Applied Bayesian for Analytics**
Type of Course	PE
Prerequisites	None
Contact Hours	30

Course Assessment Methods	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	Introduce the fundamental concepts of Bayesian statistics and explain how Bayesian inference differs from classical statistical methods.
CLO2	Develop an understanding of Bayes' theorem, likelihood, prior and posterior distributions, and their role in analytical decision-making.
CLO3	Apply Bayesian methods to simple models, binary data, normal models, linear regression, logistic regression, and hierarchical models.
CLO4	Provide hands-on exposure to Bayesian computation using Monte Carlo methods, Markov Chain Monte Carlo, Gibbs sampling, R, and OPENBUGS.

Course Content

What is Bayesian Statistics and How it is different than Classical Statistics, Foundations of Bayesian Inference, Bayes theorem, Advantages of Bayesian models, Why Bayesian approach is so important in Analytics, Major densities and their applications

Bayesian analysis of Simple Models, Likelihood theory and Estimation, Parametrizations and priors, learning from binary models, Learning from Normal Distribution

Monte Carlo Methods, Basics of Monte carol integration, Basics of Markov chain Monte Carlo, Gibs Sampling

Computational Bayes, Examples of Bayesian Analytics, Introduction to R and OPENBUGS for Bayesian analysis Bayesian Linear Models, Context for Bayesian Regression Models, Normal Linear regression, Logistic regression

Bayesian Hierarchical Models, Introduction to Multilevel models, Exchangeability, Computation in Hierarchical Models

References:

1.	Gelman, A., Carlin, J. B., Stern, H. S., Dunson, D. B., Vehtari, A., & Rubin, D. B. *Bayesian Data Analysis*. CRC Press.
2.	Kruschke, J. K. *Doing Bayesian Data Analysis: A Tutorial with R, JAGS, and Stan*. Academic Press

Course Outcomes (CO)

At the end of the course student will be able to:

CO1	Understand the necessary Bayesian concepts from practical point of view for better decision making.
CO2	Learn Bayesian approach to estimate likely event outcomes, or probabilities using datasets.
CO3	Gain "hands on" experience in creating and estimating Bayesian models using R and OPENBUGS.

Course Code	**:**	MB923
Course Title	**:**	Operations Analytics
Type of Course	**:**	PE
Prerequisites	**:**	None
Contact Hours	**:**	30

Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives

CLO1	Understand the role of analytics in operations management.
CLO2	Utilise optimisation models for operational decision-making.
CLO3	Use analytics tools for inventory, supply chain, and service operations.
CL04	Interpret analytical results and communicate managerial insights.

Course Content

Introduction to Operations Analytics

Evolution of Analytics in Operations Management - Applications in Manufacturing and Services - Predictive Analytics for Operations - Quality Control and Reliability Analytics

Optimisation Analytics

Spreadsheet Modelling of Make or Buy decision models – Production and Inventory Decision models - Financial Planning models - Marketing Research models - Work force assignment models - Sensitivity Analysis - Reduced Cost - Simultaneous change of Inputs using 100% rule.

Decision Analytics

Project Crashing Optimisation - Analytical Hierarchy Process – Interpretive Structural Equation Modelling - Decision-Making Trial and Evaluation Laboratory

Stochastic Optimisation Analytics

Poisson Process - Brownian Motion, Monte Carlo Simulation - Markov chains – Markov Properties - Classifications of Markov Chains - Chapman-Kolmogorov Equation – Absorbing Markov Chains

Emerging Trends in Operations Analytics

Artificial Intelligence in Operations - IoT-enabled Operations Analytics - Sustainability Analytics - Human-Centric Operations Analytics – Behavioural Game Theory Analytics

References:

1.	Hiller, F., & Hiller, M. (2003). Introduction to management science: a modeling and case studies approach with spreadsheets (5th ed.), New York, McGraw Hill.
2.	William E. Pinney and Donald B.McWilliams, 'Management Science: An introduction Quantitative Analysis for management', Harper & Row Publishers, 2nd Edition , (1987).
3.	Anderson, D.R., Sweeney, D.J., Williams, T.A. and Martin, K., (2012). An Introduction to Management Science: Quantitative Approach to Decision Making, 13th Edition, SouthWestern.
4.	Dinesh Kumar, U. (2017). Business analytics: The science of data-driven decision making, 2nd Edition.

Course Outcomes (CO)

At the end of the course student will be able to:

CO1	To understand the characteristics of data and selection of right statistical techniques for analysis
CO2	To apply statistical tools to analyze data, draw conclusions, and make predictions about the future.
CO3	To better understand business problems and develop problem solving skills
CO4	To develop decision-making skills from interpretation of analysis results.

GENERAL MANAGEMENT

Course Code	:	MB931
Course Title	:	Innovation and R&D Management
Type of Course	:	PE
Prerequisites	:	Nil
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To create an understanding about the creativity innovation and managing uncertainty in organisation.
CLO2	To learn to manage incremental breakthrough and discontinuous innovations.
CLO3	To understand the business context of innovation and performance measures for the innovation engine.
CLO4	To gain knowledge and skills in R and D management including planning organizing staffing scheduling controlling budgeting and performance evaluation.

Course Content

Trends in manufacturing industry - growth and opportunities - Global competition emerging concept of global supply chains - Global sourcing of raw material / components Reducing cycle times - increasing complexity in logistics - impact of industry consortiums new models of using IT manufacturing and SCM case studies.

Innovation process - critical function in the Innovation Process - Evolving innovative culture - individual and group creativity - Teams for innovation

Link between Innovation and uncertainty - Managing Incremental breakthrough and discontinuous innovations - managing streams of innovation across technology Cycles - developing leadership styles and capabilities for managing innovation streams.

Business Context - Innovation Drives Growth - performance measures for the innovation Engine - single product cash flow - the value of time - key areas of management focus Executive level Objectives - Management Objectives within the innovation engine -Decision criteria - Innovation Engine - Innovation as an information process - Element of the innovation system - Critical Success Factors - Single project and Portfolio Management issues - fostering an innovative environment.

Product and Technology life cycle - planning organizing staffing scheduling controlling - budgeting of R and D - Performance evaluation of R and D. Issues released to Managing Technocrats and scientists - Group dynamics - Training Motivation - Communication - and MIS for R and D.

References

1.	Shiomo Maintal and D.V.R. Seshadri 2007 'Innovation Management: Strategies Concepts and Tools for Growth and Profit' Sage Publications.

2.	Gerard H. Gaynor 'Handbook of Technology Management' McGraw Hill (1996).
3.	Miller W. L. and Morris L. (2008). Fourth generation RandD: Managing knowledge technology and innovation. John Wiley and Sons.
4.	Dodgson Mark David M. Gann and Nelson Phillips eds. The Oxford handbook of innovation management. OUP Oxford (2014).
5.	Shane S. (Ed.). The handbook of technology and innovation management, John Wiley and Sons (2009).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To learn about creativity innovation and uncertainty management in organizations
CO2	To learn about the innovation process strategies for managing innovation and gain R and D management skills.
CO3	To develop leadership capabilities and critical thinking skills for managing innovation and uncertainty in an organization.

Course Code	**:**	MB932
Course Title	**:**	Technology Management
Type of Course	**:**	PE
Prerequisites	**:**	Nil
Contact Hours	**:**	30
Course Assessment Methods	**:**	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To introduce the students to the latest developments in managing technology including various techniques evaluation methods and intellectual property rights.
CLO2	To explore various approaches to technology forecasting including the use of experts and morphological analysis.
CLO3	To Understand the role of techno economic feasibility studies and multi criteria decision making techniques in evaluating and selecting technologies.
CLO4	To Examine the modes of global technology transfer including the technology human interface and organizational structures involved in technology implementation.

Course Content

Definition - scope - components - History of technology developments - Issues in managing new technology - Life cycle approach to technology management.

Approaches to forecasting - Technology performance parameters - Use of Experts in technology forecasting - planning technological process - Morphological analysis of a Technology system.

Techno Economic feasibility study - Application of multi criteria decision making techniques in technologies evaluation and selection - AHP - Fuzzy AHP.

Modes of global technology transfer Technology - Human Interface - Organization structures and Technology Implementation issues in new technology.

Introduction to IPR Act - Issues - the effectiveness and management of patents Trademarks and copyrights.

References

1.	Gerard H. Gaynor 'Handbook of Technology Management', McGraw Hill, (1996).
2.	Alan L. Porter A. Thomas Roper Thomas Wimason Jery Banks and Fredrick A. Rossini 'Forecasting and Management of Technology' 2nd Edition, John Wiley and Sons Inc. (2011)
3.	Dorf R. C.. The technology management handbook. CRC Press (1999).
4.	Dodgson M. Gann D. M. and Salter A.. The management of technological innovation: strategy and practice. Oxford University Press (2008).
5.	Schilling M. A.. Strategic Management of Technological Innovation (4th Edition). McGraw Hill, Irwin (2012).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To understand the basics of technology management including forecasting decision making technology transfer and intellectual property rights.
CO2	To gain foundational knowledge and skills to assess and implement technology solutions in different contexts including multi criteria decision-making techniques and legal and ethical considerations.
CO3	To understand the issues in the implementation of new technologies at the organization level

Course Code	**:**	MB933
Course Title	**:**	Course of Independent Study
Type of Course	**:**	PE
Prerequisites	**:**	None
Contact Hours	**:**	30
Course Assessment Methods	**:**	End Assessment

Course Learning Objectives (CLO)

CLO1	Students can choose any research topic or area for course of independent study under his/her choice of the Faculty Guide.

Course Content – Not applicable

References – Not applicable.

Course Outcomes (CO)

At the end of the course student will be able

CO1	To independently develop a topic of enquiry
CO2	To demonstrate an understanding of the research topic or area of the independent study chosen
CO3	To produce a record of the learning achievements

Course Code	:	MB934
Course Title	:	Intellectual Property rights Management
Type of Course	:	PE
Prerequisites	:	None
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To introduce the students to the concepts, practices, methods, management, and valuation of IPRs.
CLO2	Aims to impart the knowledge of patent rights to Intellectual property.
CLO3	To provide knowledge on international treaties and valuation.

Course Content

History of IPRs - WIPO - TRIPS - Nature of Intellectual Property - Invention to innovation - Patenting and development.

Indian Patent System - Procedure for grant of rights on intellectual property - Patenting under PCT - Patenting in foreign countries.

International Treaties and conventions on IPRs - The Indian IPR Acts - Bayh Dole Act and issues of academic entrepreneurship.

Strategies followed before investing into Research and Development - Patent information and databases - IPR strength in India - Traditional knowledge.

Concept of Ownership - IP valuation - Technology Transfer - Licensing.

References

1.	Managing Intellectual Property by V. Sople Vinod (Prentice Hall of India Private Limited, Intellectual Property Rights and Copyrights, Publisher: Ess Publications, Seller: Indus International (2006).
2.	R. Anita Rao and Bhanoji Rao, Intellectual Property Rights A Primer, Lastian Book Company. (2008)
3.	Derek Bosworth and Elizabeth Webster, The Management of Intellectual Property, , Edward Elgar Publishing Limited (2006).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To explain the fundamental concepts of Intellectual property rights.
CO2	To identify patent systems and conventions on IPRS.
CO3	To understand evaluation of the IP valuation and Licensing.

Course Code	:	MB935
Course Title	:	Information and Internet Economics
Type of Course	:	PE

Prerequisites	:	None
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	The course internalizes several unchanging economic principles relevant to the changing online economy.
CLO2	Aims to impart knowledge on product and pricing strategies relevant to information goods.
CLO3	Helps students to understand how the rules of an auction or other trading mechanism (a "visible hand") can affect market prices and allocations.
CLO4	Make students familiar with a variety of examples of online markets and become an expert in at least two of them.

Course Content

Institutions - Business Models - Infrastructure - Building a Web Site.

Pricing - Versioning - Digital Media and Bandwidth - Rights Management.

Lock In Services - Retailing - Network Effects - Portals and Communities - Business to Business - E Commerce - Auctions.

Standards Setting - Security and Encryption - Antitrust and Tax Policies.

Misaligned Incentives - Security as an Externality - Economics of Vulnerabilities - Economics of Privacy - Fundamental improvements in software design and engineering through software economics.

References

1.	Carl Shapiro and Hal R. Varian, Information Rules, Harvard Business School Press, (1998).
2.	Kenneth C. Laudon and Carol Guercio Traver, E Commerce, Pearson Publication, 14th edition (2018).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To illustrate the basic concepts of information and the internet economy.
CO2	To analyse the online market mechanisms.
CO3	To understand the software economics and information security.

Course Code	:	MB936
Course Title	:	International Business and Strategy
Type of Course	:	PE
Prerequisites	:	None
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	This course is designed to deliver a big picture approach and introduces the field of international business strategy, strategic analysis, and development at the global level.
CLO2	It introduces the students to the Foreign Trade Policy of the country, incentives, financial assistance, and other institutional support made available to exporters and importers of the country which could be applied in their careers.
CLO3	The course students help the students to understand the methods of foreign capital investment and role of technology.

Course Content

Globalization and Business - Institutional framework for International Business - WTO, Economic Integration - Global strategy - Phases of Global Strategy - Drivers of Global Strategy Perspective - Global Value Chain and Value System.

Framework for Global Strategy - The Global Functional Model of Organization - Single and Multi-Business Global Organization - The Hybrid and The Transnational Models.

Managing the International Process - Motives and Decision to Internationalization Process, Entry Mode Strategies - De Internationalization - International Strategic Alliances - Drivers - Needs - Motives - Pitfalls - Types of Alliance - Selecting and Managing Partners Balancing Trust and Risks - Alliance Dissolution.

Subsidiary- Level Global Strategy Levels - Strategic Roles of Subsidiaries - Types of Subsidiary - Level Strategy - Global Generic Strategies - Headquarter Level - The Role of Corporate Parent - Global Sourcing Strategies - Diversification Strategies - Managing Global Portfolios.

Global Structures and Designs - Domestic Organizational Structures - Strategy and Structure of Multinationals - Balancing integrations and Local Responsiveness - Global Management of Change - Types of Change - The Change Process, Style of Change - Implementing Change - Communication Issues and Negotiations - Control Type - Model and Method.

References

1.	K, Sundaram Anant, and Black J Stewart. The International Business Environment: Text and Cases. PHI Learning, NewDelhi (2012).
2.	Lasserre., Philippe. Global Strategic Management 2e. Palgrave Macmillan, NewYork: (2007).
3.	Mellahi, Kamel, Jedrzej George Frynas, and Paul Finlay, Global Strategic Management, Oxford University Press, New Delhi (2007).
4.	Peng, Mike W. International Strategic Management, Cengage Learning India, NewDelhi(2009).
5.	Rugman, Alan M, and Simon Collinson, International Business: A Strategic Management Approach 5e. Pearson Education Limited, Harlow (2009).
6.	Verbeker, Alian. International Business Strategy.: Cambridge University Press, NewDelhi (2009).

Course Outcomes (CO)

At the end of the course student will be able

CO1	To explain the fundamental aspects of International Business and the process of globalization.
CO2	To elaborate the role and functions of International Economic Institutions.

CO3	To analyze the methods of foreign capital investment and role of technology

Course Code	:	MB937
Course Title	:	Political Behavior in Organizations
Type of Course	:	PE
Prerequisites	:	None
Contact Hours	:	30
Course Assessment Methods	:	Continuous Assessment, End Assessment

Course Learning Objectives (CLO)

CLO1	To introduce the concept of organizational politics, political skill, political will, and its importance
CLO2	To familiarise oneself with the different sources of politics and their manifestations in organizations.
CLO3	To understand the dynamics of politics and differentiate between good and toxic politics
CLO4	To enhance the political skills to be able to promote themselves and their motives ethically to achieve their objectives in a challenging environment

Course Content

Myths about politics – what is politics, power, influence, good and bad politics, why the bad rap - Consideration of Positive Politics - Definitions and Elements of Organizational Politics - Dimensions of Political Behavior - Political Behavior as Human Nature, Adaptive mechanism .

The 4 types of Organizational Politics - Understanding Power and Politics - Political Challenges - Political Challenges with the Boss – dealing with different types of bosses, Political Challenges with the Colleagues - dealing with different types of colleagues, Political Challenges in the Organization.

Political Skill, Importance of Political Skill - Politics in Talent acquisition - Power Motive - Toxic Climate - Toxic Leader - Team Level Politics (Within team, inter-team and Group level Politics - Collective Politics) - Politics of Impression Management - IM strategies

The Role of Politics, Importance - Diagnosing Political Landscape – Social Networks and Power - Informal Networks, Advice Network, Trust Network, Communication Network - Perception of Politics and outcomes

Dealing with Office Politics - Navigating Politics and Exerting Influence, Navigating Politics in Remote working - Being Constructively Political – Managing Conflict - Working with Difficult People – Forging Alliances - Politics in New Ventures – Politics and Ethics.

References

1.	Ferris and Treadway, “Politics In Organizations – Theory and Research Considerations”, Taylor & Francis Group, (2012).
2.	Gadot and Drory, “Handbook of Organizational Politics”, Edward Elgar Publishing, (2006).
3.	Bhatnagar, D, “Understanding political behaviour in organizations: A framework”, Vikalpa, (1992).
4.	Dillon, K., “HBR Guide to Office Politics”, Harvard Business Press, (2014).
5.	Harvard Business Review, “HBR Guide to Managing Up and Across”, Harvard Business Review Press (2013)

Course Outcomes (CO)

At the end of the course, the student will be able to

CO1	Understand the importance and indispensable nature of politics in organizations
CO2	Identify the political landscape and political players in their organizations
CO3	Develop political skills and the will to effectively and actively engage in politics.
CO4	Demonstrate effective strategies of engaging in constructive and ethical politics to promote their motives