

LIET (A)

AICTE Model Curriculum with effect from Academic Year 2024-25

**LORDS INSTITUTE OF ENGINEERING AND TECHNOLOGY****(An Autonomous Institution)****(With effect from the Academic Year 2024-25) - LR23 Revised****Department of Management Studies****MBA Year-II Semester-III**

S.No.	Course Code	Course Type /Code	Course Title	Scheme of Instructions				Scheme of Examination			Credits
				L	T	P	Contact hours per week	CIE	SEE	Duration in of SEE in Hrs	
<b>Theory Course</b>											
1.	P23MB301	CORE	Operations Management	4	1	-	5	40	60	3	5
2.	P23MB302	CORE	E-Global Business	4	1	-	5	40	60	3	5
3.	P23MB303	CORE	Operations Research	4	1	-	5	40	60	3	5
<b>Discipline Specific Elective- I</b>											
4.	P23MB304	DSE	Investment Management (Finance)	4	1	-	5	40	60	3	5
	P23MB305		Marketing Engineering (Marketing)	4	1	-					
	P23MB306		Compensation Management (Human Resource)	4	1	-					
	P23MB307		Data Base Management Systems (Systems)	4	1	-					
	P23MB308		Introduction to Business Analytics (Business Analytics)	4	1	-					
	P23MB309		Business Feasibility and Analysis (Entrepreneurship)	4	1	-					
<b>Discipline Specific Elective – II</b>											
5..	P23MB310	DSE	Financial System & Services (Finance)	4	1	-	5	40	60	3	5
	P23MB311		Advertising and Retail Management (Marketing)	4	1	-					
	P23MB312		Industrial Relations and Labour Law (Human Resource)	4	1	-					
	P23MB313		Business Analytics (Systems)	4	1	-					
	P23MB314		Text, Web and Social Media Analytics (Business Analytics)	4	1	-					
	P23MB315		Innovation and Design Thinking (Entrepreneurship)	4	1	-					
<b>Project Work</b>											
6.	P23MB3P1	PROJ	Summer Internship* (During Summer Vacations after II Semester)	-	2	-	2	50	-	-	2
7.	P23MB3P2	PROJ	Project Work Synopsis with Seminar**	-	2	-	2	50	-	-	2
<b>TOTAL</b>				<b>44</b>	<b>15</b>	<b>-</b>	<b>29</b>	<b>300</b>	<b>300</b>	<b>15</b>	<b>29</b>

L: Lecture(Hrs/Wk/Sem) T: Tutorial (Hrs/Wk/Sem) P: Practical

CIE: Continuous Internal Evaluation

SEE: Semester End Examination

DSE: Discipline Specific Elective

ID: Interdisciplinary- Elective

PROJ: Project work

**Note:**

\* Students Shall Undergo compulsory Summer Internship in any selected Organization for a period of One Month and submit "Internship Completion Certificate: to the College\*

\*\* Students has to choose a Topic and do a Dissertation in any selected Origination for a period of One Month and submit a Project Work Synopsis\*\*

1. Each contact hour is a Clock Hour.
2. The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

Course-Code	Course Title				Core/ Elective	
<b>P23MB301</b>	<b>OPERATIONS MANAGEMENT</b>				Core	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:** The Objectives of this Course are:

1. To provide an understanding on the Process Planning, Design, Process Layout, Types of Production systems and to comprehend the different ways of measuring Productivity.
2. To develop Skills necessary to understand Work study and know the Techniques to Manage Inventory.
3. To provide knowledge on managing Quality and ways Total Quality Management facilitates Organizational effectiveness.

**Course Outcomes:** After Completion of the Course, Students will be able to:

1. Apply knowledge of basic Concepts of Operations Management for developing processes and improving Operational Performance.
2. To develop aggregate capacity plans and Mater Production Schedule in operation environments and enabling the importance of facility location, layout and line balancing.
3. To identify and eliminate nonessential operations and develop feasible method of performing a job by applying work study techniques.
4. To calculate inventory levels and order quantities to make use of various inventory classification models.
5. To advance cognizance on Total Quality Management and to efficaciously implement the contemporary Quality techniques in an Organization.

### **Unit - I: Introduction**

Similarities and Differences between Products & Services. Basic Manufacturing Process: Casting, Machining, Welding, shearing Extrusion, heat treatment and unconventional machining. The transformation Process: Manufacturing, Service & Hybrid Agile Manufacturing. Operations Strategy.

Process design – Project, Job, Batch, Assembly and Continuous. Factors effecting Process design. Functions of Production, Planning & Control. Interface of Product Life Cycle & Process Life Cycle.

### **Unit – II: Long – range capacity Planning:**

Capacity Planning, Line Balancing, facility location and Facility layout. Service facility layout.

**Aggregate Planning:** Aggregate Demand, criteria for selecting Aggregate Plans, Aggregate Plans for Service & mathematical Models for Aggregate Planning.

**Master Production Scheduling:** Objective, Procedure and Time frame.

**Sequencing of Operations:** n-Jobs with one, two and three facilities.

**Maintenance Management:** Repair Programmes, Break down, Preventive and Corrective maintenance. Maintenance issues in service organizations.

### **Unit - III: Work Study & Service Management:**

- (a) Work study: Definition and its advantages and the various components.

Techniques of methods analysis and work measurement

(b) Service Management: Nature of services. Types of Service operations- Quasi manufacturing, customer as participant and customer as product, Scheduling challenges in various service Operations, Value creation through service. Service quality, Culture and innovation

#### **Unit - IV: Materials Management:**

Need and importance of Materials management. Materials Requirement Planning, Manufacturing Resource Planning. Purchase Management: Sources of Supply of Materials, selection, evaluation and rating of Vendors . Methods of vendor rating. Value Analysis : the concept and its role in cost reduction.

#### **Unit - V: Stores Management:**

Inventory decision: Need ,functions and Significance of Inventory, Safety Stock . Deterministic Models of Inventory: Purchase and Manufacturing Models without and with shortages. Probabilistic Models of Inventory : Fixed order quantity systems and fixed period quantity systems

Stores Management: Functions of Stores and Materials control. Classification, Codification , Simplification and Standardization of materials . Bin Card, Double-Bin and stores Ledger. Selective Inventory Control: ABC, XYZ, VED, FNS and SDE Analysis.

#### **Suggested Readings:**

1. Norman Gaither & Greg Frazier, Operation Management 9th edition, Cengage Learning..
2. Stevenson J. William, “Operations Management”, 2009, 9th Ed. Tata McGraw-Hill.
3. Amol Gore and Robert Panizzolo, Operation Management
4. R. Panneerselvam, Production and Operation Management 3rd edition, PHI
5. Danny Samson and Prakash J.Singh, “Operations Management-An integrated approach”, 2009, 1st Ed. Cambridge
6. Ray Wild, “Operations Management, 2003, Thomson Learning.
7. KanishkaBedi, “Production and Operations Management”, 2007, 3rd Ed. Oxford University Press.
8. Everett. Adam, Jr. and Ronald J. Elbert, “Production and Operations Management Concepts, Models and Behaviour”, 2003, Prentice Hall of India, 5th Ed.
9. S.N. Chary Production & Operation Management.

Course-Code	Course Title				Core/ Elective	
P23MB302	E-GLOBAL BUSINESS				Core	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. To understand the fundamentals of e-commerce and its impact on global business.
2. To explore the challenges and opportunities associated with conducting business in a digital environment.
3. To analyse the strategies and technologies used in e-global business.
4. To develop critical thinking and problem-solving skills in the context of e-global business.

**Course Outcomes:**

By the end of this course, students will be able to:

1. Identify and explain the key concepts and principles of e-global business.
2. Evaluate the impact of e-commerce on global business operations.
3. Analyse and develop strategies for conducting business in a digital environment.
4. Apply critical thinking skills to solve problems and make informed decisions related to e-global business.

**Unit 1: Introduction to e-Global Business**

Unit 1: Introduction to e-Global Business

Introduction to e-commerce and its evolution, Globalization and the digital economy, Benefits and challenges of e-global business, Global market entry strategies, Digital transformation and its impact on global business, Evolution of online marketplaces and their role in e-global business, The role of technology and innovation in driving e-commerce growth, Regulatory and legal frameworks governing e-global business, The role of artificial intelligence (AI) and automation in e-global business, Digital entrepreneurship and the emergence of startups in the digital space, Cybersecurity challenges in e-global business and methods for protection, The impact of social media on global business and customer engagement.

**Unit 2: E-Global Business Models**

Types of e-business models (B2C, B2B, C2C, etc.), E-marketplaces and online platforms- Digital marketing and customer relationship management- Payment systems and security in e-global business- Subscription-based business models and recurring revenue strategies- Influencer marketing and its effectiveness in e-commerce, Collaborative consumption and its impact on e-global business-Influencer selection and management strategies for effective digital marketing, Strategies for building and managing online communities to drive customer loyalty.

**Unit 3: Managing E-Global Business Operations**

Supply chain management in a digital environment- Logistics and fulfilment in e-commerce- International trade and legal considerations- Cross-cultural management and customer service- Reverse logistics and managing returns in e-global business- Intellectual property

rights and protection in digital transactions, Customer data privacy and compliance with data protection regulations- Cloud computing and its role in supporting scalable and flexible e-commerce operations- Supply chain sustainability and responsible sourcing in e-global business- Risk management in e-global business operations.

#### **Unit 4: E-Global Business Strategies**

Developing an e-global business strategy- E-marketing and online advertising- Data analytics and business intelligence- Social media and online reputation management- Personalization and customization strategies in e-commerce- Competitive analysis and benchmarking in the digital marketplace- Personalization through machine learning and recommendation systems- Social commerce and the integration of e-commerce with social media platforms- Voice search optimization and its impact on e-commerce websites.

#### **Unit 5: Emerging Trends in E-Global Business**

Mobile commerce and the rise of m-commerce, Artificial intelligence and machine learning in e-commerce, Blockchain technology and its applications, Ethical and sustainability issues in e-global business, Voice commerce and the impact of smart speakers on e-commerce- (VR) in enhancing online shopping experiences, Cryptocurrencies and their potential for transforming global payments, Environmental sustainability practices in e-global business- Virtual reality (VR) and augmented reality (AR) in transforming the online shopping experience-The ethical implications of AI and automation in e-commerce decision-making processes.

#### **Suggested Books:**

1. "E-Commerce 2025: 11 Trends Impacting E-Commerce Companies This Decade" by Gerald Celente
2. "Global E-commerce: Impacts of National Environment and Policy" by Yong Zhou
3. "E-Business and E-Commerce Management" by Dave Chaffey and Tanya Hemphill
4. "Global Electronic Commerce: A Policy Primer" by Catherine L. Mann and Sarah Cleeland Knight
5. "e-Business: The Indian Scenario" by Ravi Kalakota and Marcia Robinson
6. "e-Commerce in India: A Game Changer for the Economy" by Pradeep Kumar.
7. "Global E-commerce: Impacts of National Environment and Policy" edited by Geng Cui and Yu Tian
8. "Digital Marketing: Strategy, Implementation and Practice" by Dave Chaffey and Fiona Ellis-Chadwick
9. Jayakar Dalavai, Vidyadhar Reddy Aileni, International Business, BS Publications

Course-Code	Course Title				Core/ Elective	
<b>P23MB303</b>	<b>OPERATIONS RESEARCH</b>				Core	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:** The Objectives of this Course are:

1. To familiarize the Students with the basic Concepts and tools of Operations Research.
2. To make the Students understand the mathematical models used in Operations Research.
3. To provide the Students to learn the techniques constructively to make effective Business decisions.

**Course Outcomes:** After Completion of the Course, Students will be able to:

1. Develop mathematical model and solve the real life system with limited constraints by applying LPP.
2. Formulate and solve transportation and assignment concepts to implement Supply chain management.
3. Evaluate alternatives using decision making under risk and uncertainty and game theory.
4. Apply PERT and CPM techniques to plan, schedule and control project.
5. Apply simulation process in queuing theory to evaluate the system.

#### **Unit – I: Introduction**

- i. Introduction to OR- Origin, Nature, definitions, Managerial applications and limitations of OR.
- ii. Linear and Non- Linear, Integer, Goal [Multi-Objective] and Dynamic Programming Problems (Emphasis is on Conceptual frame work-no numerical problems).
- iii. Linear Programming: Mathematical model, Formulation of LPP, assumptions underlying LPP, Solution by the Graph, Exceptional cases.

#### **Unit – II: Allocation Model - I**

- i. LPP - Simplex Method- Solution to LPP problems Maximisation and Minimisation cases Optimality conditions. Degeneracy.
- ii. Dual - Formulation, Relationship between Primal - Dual, Solution of dual, Economic interpretation of dual.
- iii. Sensitivity analysis and its implications.

#### **Unit – III: Allocation Model - II**

- i. Transportation Problem (TP) - Mathematical model, IBFS using northwest corner rule, Row and Column Minimum methods, Matrix minimum method(LCM) and Vogel's approximation method, Unbalanced TP, Degeneracy, Optimality Test and Managerial applications.
- ii. Assignment Problem (AP): Mathematical model, Unbalanced AP, Restricted AP, method of obtaining solution- Hungarian method.
- iii. Travelling salesman problem, Managerial applications of AP and TSP.

#### **Unit – IV: Network Models**

- i. Network fundamentals- scheduling the activities -Fulkerson's Rule –CPM- earliest and latest times -determination of ES and EF in the Forward Pass - LS and LF in backward pass determination of Critical Path, Crashing, time cost trade off.
- ii. PERT-Beta Distribution, probabilistic models, Calculation of CP, resource analysis and allocation.

#### **Unit – V: Waiting Line / Competitive Strategy Models**

- i. Queuing Theory - Concepts of Queue/Waiting Line - General structure of a Queuing system- Operating characteristics of Queues, deterministic Queuing models - Probabilistic Queuing Model –Cost Analysis - Single Channel Queuing model - Poisson arrival and exponential service times with infinite population.
- ii. Game Theory- concepts, saddle point, Dominance, Zero-sum game, two, three and more Persons games, analytical method of solving two person zero sum games, graphical solutions for  $(m \times 2)$  and  $(2 \times n)$  games.
- iii. Simulation- Process of simulation, Applications of simulation to different management Problems.

#### **Suggested Readings:**

1. N.D. Vohra, "Quantitative Techniques in Management", 2010, 4th Ed. TMH.
2. J.K. Sharma, "Operations Research Theory and Applications 2009, 4th Ed. Macmillan.
3. Kasana, HS & Kumar, KD, "Introductory Operations Research theory and applications", 2008, Springer.
4. Chakravarty, P, "Quantitative Methods for Management and Economics", 2009, 1st Ed. HPH.
5. Barry Render, Ralph M. Stair, Jr. and Michael E. Hanna, "Quantitative analysis for Management", 2007, 9th Ed. Pearson.
6. Pannerselvam, R, "Operations Research", 2006, 3rd Ed. PHI.
7. Selvaraj, R, "Management Science Decision Modeling Approach", 2010, 1st Ed. Excel.
8. Ravindren, A, Don T. Phillips and James J. Solberg, 2000, "Operations Research Principles and Practice", 2nd Ed. John Wiley and Sons.
9. Hillier, Frederick S. & Lieberman, "Introduction to Operations Research Concepts and Cases", 2010, 8th Ed. TMH.
10. Prem Kumar Gupta & others, "Operations Research", 2010, S. Chand.



Course-Code	Course Title				Core/ Elective	
P23MB304	INVESTMENT MANAGEMENT (FINANCE)				Elective-1	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	-	-	40	60	4

**Course Objectives:**

- 1) To explain the basic concepts of risk and return
- 2) To explain the concept of portfolio return and risk and portfolio theories
- 3) To understand the features and valuation of debt instruments
- 4) To understand the features and valuation of Common stock
- 5) To describe portfolio evaluation methods

**Course Outcomes:**

After studying this Course, the student will be able to:

- 1) Differentiate various avenues of investment on the basis of risk and return
- 2) Gain basic knowledge of analysing stocks
- 3) Make valuation of equity, debt and portfolio instruments
- 4) Gain an understanding of mutual funds, their performance evaluation and regulation.

**Unit – I: Introduction to Investments:**

Concept; Real vs. Financial assets; Investment decision process; Sources of investment-information; Investment vs. Speculation; Factors to be considered in investment decision- Liquidity, Return, Risk, Maturity, Safety, Tax and Inflation. The concept and measurement of return-realized and expected return. Ex-ante and ex-post returns.

The concept of risk. Sources and types of risk. Measurement of risk-Range, Standard Deviation and Co-Efficient of Variation. Risk-return trade-off. Risk premium and risk aversion.

Approaches to investment analysis-Fundamental Analysis; Technical Analysis (including basic numerical on RSI, Oscillators, Moving averages for security analysis); Efficient Market Hypothesis.

**Unit – II: Portfolio Theory:**

Concept of portfolio. Portfolio return and risk. Harry Markowitz's Portfolio theory, construction of minimum risk portfolio, the single-index model. Capital market theory: Introduction of risk-free asset, Capital Market Line, Separation theorem.

**Unit – III: Fixed Income Securities - Analysis, Valuation and Management:**

Features and types of debt instruments, Bond indenture, factors affecting bond yield. Bond yield measurement-Current yield, holding period return, YTM, AYTM and YTC. Bond valuation: Capitalization of income method.

Bond-price theorems, Valuation of compulsorily / optionally convertible bonds, Valuation of deep discount bonds. Bond duration, Macaulay's duration and modified Macaulay's duration.

Bond convexity, Considerations in managing a bond portfolio, term structure of interest rates, risk structure of interest rates.

Managing Bond Portfolio: Bond immunization, active and passive bond portfolio management strategies.

#### **Unit – IV: Common Stocks - Analysis and Valuation:**

Basic Features of Common Stock, Approaches to valuation—Balance sheet model, dividend capitalization models; earnings capitalization models; Price-Earnings multiplier approach and capital asset pricing model, Free Cash flow model, relative valuation using comparables—P/E, P/BV, P/S.

Security Market Indexes, their uses; computational procedure of Sensex and Nifty.

Capital asset pricing model (CAPM): Security Market Line. Identifying over-priced and under-priced securities. Arbitrage pricing theory (APT): The Law of one price, two factor arbitrage pricing, Equilibrium risk-return relations. A synthesis of CAPM and APT.

#### **Unit – V: Portfolio Evaluation:**

Performance measures—Sharpe's reward to variability index, Treynor's reward to volatility index, Jensen's differential index, Fama's decomposition of returns.

Mutual funds: genesis, features, types and schemes. NAVs, costs, loads and return of mutual funds, Problems and prospects in India, Regulation of mutual funds and investor's protection in India.

#### **Suggested Books:**

1. Alexander. G.J, Sharpe. W.F and Bailey. J.V, "Fundamentals of Investments", PHI, 3rd Ed.
2. Zvi Bodie, Alex Kane, Marcus.A.J, Pitabas Mohanty, "Investments", TMH, 8th Ed.
3. Prasanna Chandra, "Investment Analysis and Portfolio Management", TMH, 3rd Ed.
4. Charles.P.Jones, "Investments: Analysis and Management", John Wiley & Sons, Inc. 9th Ed.
5. Francis. J.C. & Taylor, R.W., "Theory and Problems of Investments". Schaum's Outline Series, McGraw Hill
6. Herbert. B. Mayo, "Investments: an Introduction", Thomson – South Western. 9th Ed.
7. Peter L. Bernstein and Aswath Damodaran, "Investment Management", Wiley Frontiers in Finance.
8. Dhanesh Khatri, "Security Analysis and Portfolio Management", 2010, Macmillan Publishers.
9. Sudhindra Bhat, "Security Analysis and Portfolio Management", 2009, Excel Books.
10. Preeti Singh, Investment Management, 2010, HPH, 17th Revised Edition.
11. Stephen A. Ross, Randolph Westerfield, and Jeffrey Jaffe, "Corporate Finance", TMH.
12. S. Chand "Investment Management: Security Analysis & Portfolio Management".
13. S. Kevin, "Analysis and Portfolio Management", PHI.
14. Punithavathy Pandian, "Security Analysis and Portfolio Management", Vikas Publishing House
15. Donald E. Fisher and Ronald J. Jordan: "Securities Analysis and Portfolio Management", Prentice Hall.
16. Graham & Dodd, "Security Analysis and Portfolio Management", McGraw Hill.
17. Jack Clark Francis, "Investment", TMH, New Delhi.
18. Dr.V.A.Avadhani, "Investment Management", HPH

Course-Code	Course Title				Core/ Elective	
P23MB305	MARKETING ENGINEERING (MARKETING)				Elective-I	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course objectives:**

The objectives of this course are;

1. Acquainting the readers with modeling of market variables using a wide variety of models
2. Use of market segmentation and perceptual maps to provide an insight into marketing strategy analysis
3. Use of forecasting models to measure demand and market response modeling
4. To gain an insight into quantitative and qualitative response models and their role in strategic analysis
5. To help understand how modeling can be used in advertising decision making and pricing analysis

**Course Outcomes:**

After reading this course one should be able to;

1. Understand the relevance of modeling in marketing for logical judgment
2. Appreciate the business and economic lifetime value of marketing engineering
3. Be well versed with the various models, both qualitative and quantitative in marketing engineering
4. Understand the relevance of using modeling in marketing as a decision making tool
5. Learn the importance of marketing engineering as a strategic marketing analysis tool

**Unit – I:**

Marketing Engineering Approach, Key Concepts of Marketing Engineering (ME) Model, Verbal, Model, Box and Arrow Model, Response Model, Mathematical Model, Models Vs Judgements, Trial / Repeat Model, Marketing Decision Environment, Tools for Marketing Engineering , Business Value of Marketing Engineering, Customer Value, Value in Use Assessment, Economic Life Time Value, Approaches to Measure Customer Value.

**Unit – II:**

Segmentation, Targeting, Positioning-Traditional Segmentation, Targeting, Positioning through Brand Linkages, Perceptual Maps, Preference Maps, Limitations of Perceptual and Preference Map Forecasting Methods – Judgemental Method, Market and Product Analysis Method, Time Series Methods, Causal Methods, Product Life Cycle, New Product Forecasting Models – The Bass Model Bases Model, Selection of Forecasting Methods.

**Unit – III:**

Market Response Models: Concept of a Response Model, Response Models – AggregateResponse Model, Individual Response Models, Shared Expenditure Models, Qualitative Response Models.

**Unit – IV:**

Strategic Market Analysis, Strategic Marketing, Decision Making, Advertising Budget Model, Rao & Miller Model, Ad budg model,the Full Model, Advisor Model, Media Decisions, Steps in Ad design Adcad systems, Syntex Approach.

**Unit –V:**

Geo-demographic analysis, Gravity Model, Pricing Models, Differential Pricing, Competitive Bidding Bases for Differential Pricing, Revenue Management Process, Promotional analysis. Promotional Effects, Promotional types and targets, Promotional Effects Model.

**Suggested Books:**

1. Gary L Lilien, Arvind Rangaswamy,Arnaud De Bruyn, “ Principles of Marketing Engineering “ 2005,P H I.
2. Gary L Lilien,Philip Kotler,Sridhara Moorthy, “Marketing Models “ ,2005,P H I
3. Gary L Lilien, Arvind Rangaswamy “Marketing Engineering “ , 2006 Trafford Publishing.
4. Paul W Farris, Neil T Bendle,Phillip E.Pfeifer, David J.Reibstein, “ Marketing Metrics”, 2010 Wharton School Publishing.

Course-Code	Course Title				Core/ Elective	
<b>P23MB306</b>	<b>COMPENSATION MANAGEMENT (HUMAN RESOURCE)</b>				<b>Elective-I</b>	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**COURSE OBJECTIVES:**

1. To demonstrate various perspectives of compensation management
2. To provide thorough knowledge of planning and administering compensation in different sectors.
3. To understand the nature of executive and international compensation

**COURSE OUTCOMES:**

Upon completion of this course, the student will be able to

- 1 . Understand the fundamental concepts and theories of compensation.
- 2 . Recognize the importance of compensation strategy.
3. Analyse, integrate, and apply the knowledge of administering wages in different sectors according to the different wage laws.
4. Comprehend the employee benefits and services
5. Appreciate the advancements in managing compensation at global level.

**UNIT I: Fundamentals of Compensation**

Concept of Compensation; Different perspectives of Compensation – Stakeholders and determinants of compensation; Compensable Factors; Wage Differentials and Types of Compensation – Base pay, Variable Pay, Benefits, Incentives; The concepts of Minimum wage, Fair wage, Living wage, Money and real wages; Wage Theories – Macro and Micro.

**UNIT II: Compensation Planning and Employee Contributions**

Developing a total Compensation Strategy and Pay Roll Management System – Competitive Advantage – Compensation Structure - Wage and Salary surveys, the wage curve, Pay grades and Rate ranges, Preparing Salary matrix; Compensation management’s association with Employee Motivation, Job design and Job evaluation; Performance-related compensation, Individual and team-based compensation.

**UNIT III: Wage Administration**

Wage Administration, Wage Policy and Wage Legislation in India - The Minimum Wages Act, 1948. The Payment of Wages Act, 1936. The Payment of Bonus Act, 1965. The Equal Remuneration Act, 1976. The Payment of Gratuity Act, 1972. The Employees’ Provident Fund and Miscellaneous Provisions Act, 1952; Wage Structure in different Sectors – in Central Government, in State Government, in PSEs and in Nationalised Banks; Wage Boards - structure, scope and functions – Pay Commissions – Compensation Committees; Compensating contingent employees.

#### **UNIT IV: Employee Benefits and Services**

Legally required and Discretionary employee benefits; Employee services; Designing, Planning and Administration of benefits program; Totally integrated employee benefits; Fringe Benefits and Voluntary Retirement Schemes.

#### **UNIT V: Executive and International Compensation**

Nature and management of Executive compensation; Executive Compensation theories – Agency theory, tournament theory and Social comparison theory. International Compensation - Design and Approaches to International remuneration with special reference to expatriates and the remuneration of third country nationals. Challenges of international compensation

#### **Essential Readings:**

1. Joseph J. Martocchio- Strategic Compensation- 3rd Edition
2. Dr. Pradeep Kumar Das, Dr. Madan Chettri and Ms. Roshni Tamang., Compensation Management, Lulu Publication, 2021, 1st Edition.
3. Tapomoy Deb, Compensation Management – Texts and Cases, Excel Books, 2009, 1st Edition.
4. S. K. Bhatia, New Compensation Management in Changing Environment – Managerial Remuneration and Wage & Salary Administration, A Professional Manual, Deep and Deep Publications Pvt. Ltd., 2009, 3rd Edition.
5. R.C. Sharma and Sulabh Sharma, Compensation Management, Sage Publications, 2019,
6. Dr.Kanchan Bhatia,” Compensation Management”, HPH
7. Peter T.Chingos, “Paying for Performance: A guide to Compensation Management, 2nd edition, Wiley Publications.

#### **Suggested Readings:**

1. Milkovich, Newman & Gerhart, Compensation, Tata McGraw Hill, 2011, 10th Edition
2. Richard I. Henderson, Compensation Management in a Knowledge-Based World, Pearson Education, 2009, 10th Edition.
3. B D Singh, Compensation and Reward Management, 2008, Excel Books.
4. Dr. Vinay Ojha, “Compensation and Reward Management”, 2019, 7th Edition.
5. Luis R. Gomez-Mejia & Steve Werner, Global compensation - Foundations and perspectives Routledge, 2008.
6. Mousmi S. Bhattacharya & Nilanjan Sengupta, Compensation Management, Excel Books, 2009, 1st Edition.
7. Dipak Kumar Bhattacharya Compensation Management- Oxford University Press, 2015

Course-Code	Course Title			Core/ Elective		
<b>P23MB307</b>	<b>DATA BASE MANAGEMENT SYSTEMS (SYSTEMS)</b>			<b>Elective-I</b>		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. The objective of the course is to present an introduction to database management systems, with an emphasis on how to organize, maintain and retrieve - efficiently, and effectively - information from a DBMS.
2. To explain basic database concepts, applications, data models, schemas and instances.
3. Describe the basics of SQL and construct queries using SQL.
4. Use the basics of SQL and construct queries using SQL in database creation and interaction.
5. Analyze and Select storage and recovery techniques of database system.

**Course Outcomes:**

1. Students can apply the basic concepts of Database Systems and Applications
2. Design a commercial relational database system (Oracle, MySQL) by writing SQL using the system.
3. Students can get to facilitate students in Database design and also to familiarize issues of concurrency control and transaction management in DBMS

**Unit-1: Database System Architecture and Data Models:**

Data Abstraction, Data Independence, Data Definition Language (DDL), Data Manipulation Language (DML), Entity-relationship model, network model, relational and object oriented data models, integrity constraints, data manipulation operations.

**Unit-2: Relational Query Languages and Relational Database Design:**

Relational algebra, Tuple and domain relational calculus, SQL3, DDL and DML constructs, Open source and Commercial DBMS - MYSQL, ORACLE, DB2, SQL server.

**Unit-3: Query Processing and Optimization and Storage Strategies:**

Evaluation of relational algebra expressions, Query equivalence, Join strategies, Query optimization algorithms, Indices, B-trees, hashing.

**Unit-4: Transaction Processing and Database Security:**

Concurrency control, ACID property, Serializability of scheduling, Locking and timestamp based schedulers, Multi-version and optimistic Concurrency Control schemes, Database recovery Authentication, Authorization and access control.

**Unit-5: SQL and PL/SQL Concepts:**

Basics of SQL, DDL,DML,DCL, structure – creation, alteration, defining constraints – Primary key, foreign key, unique, not null, check, IN operator, aggregate functions, Built-in functions –numeric, date, string functions, set operations, sub-queries, correlated sub-queries, join, Exist, Any, All , view and its types., transaction control commands

**Suggested Books:**

1. "Database System Concepts", 6th Edition by Abraham Silberschatz, Henry F. Korth, S. Sudarshan, McGraw-Hill.
2. "Fundamentals of Database Systems", 7th Edition by R. Elmasri and S. Navathe, Pearson
3. "An introduction to Database Systems", C J Date, Pearson.
4. "Modern Database Management", Hoffer, Ramesh, Topi, Pearson.
5. "Principles of Database and Knowledge – Base Systems", Vol 1 by J. D. Ullman, Computer Science Press.



<b>P23MB308</b>	<b>INTRODUCTION TO BUSINESS ANALYTICS (BUSINESS ANALYTICS)</b>				<b>Elective</b>	
Prerequisites	Contact Hour per Week			CIE	SEE	<b>Elective-I</b>
	L	T	P			
	4	1	-	40	60	5

**Course Objectives: Course Objective :** The objective of the course is

- 1.To provide an understanding of Basic concepts of Business Analytics
- 2.Descriptive, Predictive and Prescriptive Analytics a
- 3.An overview of Programming using R.

**Course Outcomes:** After Completion of the Course, Students will be able to:

1. To recognize, understand and apply the language, theory and models of the field of business analytics.
2. Foster an ability to critically analyse, synthesize and solve complex unstructured business problems.
3. To Analyze Predictive Analytics using Trend Lines and Data Mining Approach
4. To examine Prescriptive Analytics using Linear and Non Linear Programming
5. To Study Programming using R to Control and Manage Data

### **Unit I: Introduction to Business Analytics**

Definition of Business Analytics, Categories of Business Analytical methods and models, Business Analytics in practice, Big Data - Overview of using Data, Types of Data.

### **Unit II: Descriptive Analytics**

Over view of Description Statistics (Central Tendency, Variability), Data Visualization-Definition, Visualization Techniques – Tables, Cross Tabulations, charts, Data Dashboards using Ms-Excel or SPSS.

### **Unit III: Predictive Analytics**

Trend Lines, Regression Analysis –Linear & Multiple, Forecasting Techniques, Data Mining -Definition, Approaches in Data Mining- Data Exploration & Reduction, Classification, Association, Cause Effect Modelling.

### **Unit IV: Prescriptive Analytics**

Overview of Linear Optimization, Non Linear Programming Integer Optimization, Cutting Plane algorithm and other methods, Decision Analysis – Risk and uncertainty methods.

### **Unit V: Programming Using R.**

R Environment, R packages, Reading and Writing data in R, R functions, Control Statements, Frames and Subsets, Managing and Manipulating data in R.

**Suggested Readings:**

1. Camm, Cochran, Fry, Ohlmann, Anderson, Sweeney, Williams- **Essentials of Business Analytics**, Cengage Learning.
2. James Evans, **Business Analytics**, Pearson, Second Edition, 2017.
3. Albright Winston, **Business Analytics- Data Analysis-Data Analysis and Decision Making**, Cengage Learning, Reprint 2016.
4. Sahil Raj, **Business Analytics**, Cengage Learning.

Course-Code	Course Title			Core/ Elective		
<b>P23MB309</b>	<b>BUSINESS FEASIBILITY AND ANALYSIS (ENTREPRENEURSHIP)</b>			<b>Elective-I</b>		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. To familiarize the students with the mechanics of appraisal and evaluation of projects.
2. To understand the concept of SCBA
3. Learn to write a Business Plan

**Course Outcomes:**

1. Forecast of cash flows
2. Preparation of Business plan with all inputs
3. Application of network techniques of project management

**UNIT-I: Introduction:**

a) Concept of Project: Characteristics and importance of Projects – Project development cycle - Types of projects - Risk-return trade off. (b) Identification of investment opportunities: Sources of new project ideas - Preliminary screening of projects. (c) Feasibility Studies and Reports: Broad aspects of appraisal – Market feasibility, Technical feasibility, Operational feasibility, financial feasibility.

**UNIT-II: Feasibility Appraisal:**

a) Market Appraisal: Market and demand analysis - Market survey - Demand forecasting - Sales projections. (b) Technical Appraisal: Issues involved in technical feasibility – Production technology - Materials and inputs - Plant capacity - Site selection – Plant layout – Site preparation - Civil works and structures - Details of machines and equipment- Specification and cost determination. (c) Operational Appraisal: Heads of cost - Estimates of cost of production - Break even point - Economics of working - Profitability.

**UNIT-III: Business Plan:**

Financial Appraisal: (a) Cost of project and means of financing (b) Estimation of cash inflows - Basic principles of estimation (c) Risk analysis in capital budgeting, certainty equivalent, standard deviation, sensitivity analysis etc. (d) Writing a Business Plan

**UNIT-IV: Project Financing & SCBA:**

a) Social Cost Benefit Analysis: Rationale of SCBA - Approaches to SCBA in India. (b) Financing Projects: Appraisal procedures and practices of financial institutions - Financial statements required for project financing

**UNIT-V: PERT & CPM:**

a) Project Implementation: Network techniques - Critical path - Project Crashing - Time and cost over runs. PERT and CPM - Project management - Forms of organization – Project planning and control.

**Suggested Readings:**

1. Project Appraisal: A Third World View Point: UNID Publications - 1996.
2. Project Evaluation and Management: M.K.Singh.
3. Projects, Preparation, Appraisal and Implementation: Prasanna Chandra, TMH, New Delhi – 1998.
4. Project Financing: H.P.S. Pahwa.
5. Clifford. F. Gray, Erik. W. Larson: Project Management, the Managerial Emphasis, McGraw Hill - 2000.
6. Mike McKeever, How to Write a Business Plan

Course-Code	Course Title			Core/ Elective		
<b>P23MB310</b>	<b>FINANCIAL SYSTEM AND SERVICES (FINANCE)</b>			<b>Elective-II</b>		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objective:**

- 1) To create awareness about Financial System and Financial services in India.
- 2) To learn about the role of financial institutions in India
- 3) To understand the importance of Venture Capital

**Course Outcomes:**

- 1) To explain the importance ,functions of financial system and financial services
- 2) To understand the concept of merchant banking and its functions
- 3) To learn the venture capital financing modes used to raise finance
- 4) To understand factoring ,bill discounting and credit rating services needed for businesses

**Unit I : The Financial System In India**

Functions of the Financial System – structure of Indian financial system – Indian Money market – composition of money markets – money market instruments . Indian Capital Market – Importance of Capital Market . Classification of Indian capital market – Primary Market and Secondary Market - Products and Participants – Regulation of capital market – Recent trends in Indian capital Market.

**Financial Services:** Meaning, scope, Features and Importance of Financial Services. Classification of Financial service Industry. Financial Innovation - Causes for Financial Innovation. New Financial products and services – Fintech services – types , growth and . Present scenario and Challenges.

**Unit-II: Financial Institutions:**

Evolutions of banking in India - Functions of RBI and regulatory framework – Commercial banking in India – Role of private sector banks and public sector banks – changing role of commercial bank in India . NBFCs – Role and functions. Financial institutions in India – NABARD, SIDBI, EXIM Bank and NHB.

**Unit III :Introduction to Merchant Banking**

Concept and Evolution of Merchant Banking in India- Functions of a Merchant Banker - Regulatory Framework for Merchant Bankers in India - SEBI guidelines

**Issue Management – Process and Underwriting** -Public issue management – functions – categories of securities issue – role of issue manager. Obligations Relating to issues-Pricing of Issue- Underwriting

**Unit-4 : Venture Capital Financing:**

Origin-concept of venture capital financing-The Paradigm shift in venture capital-Features-Importance of VCF- Stages of VCF–Factors affecting VCF-Selection procedure of venture capitalists-Venture Capital Industry in India-Venture capital providers in India- SEBI(venture

capital fund) Regulations- Indian venture capital scenario- Evaluation of VCF –Conventional valuation-First Chicago Method- Revenue Multiplier Method- -Role of TDICI in building venture capital fund-Exit strategies of venture capitalists- Issues-Challenges & Suggestions for the growth of venture capital finds in India

### **Unit V Factoring and Credit Rating :**

**Factoring:** Factoring concept, process and forms. Functions of a factor. cost of factoring, Legal aspects of factoring, Factoring scenario in India. Bill discounting Legal aspects of bill discounting. Difference between and Bill discounting and factoring.

**Credit rating:** Meaning and Process of Credit rating of financial instruments. Rating methodology. Introduction to various Rating Agencies. Rating Symbols of different companies.

### **Suggested books:**

1. E.Gordon and K.Natarajan , 2019, Financial Markets, Instruments and Financial Services, 11th edition, Himalaya Publication House , Mumbai.
2. Clifford Gomez , 2015, Financial Markets, Instruments and Financial Services, PHI learning Private Limited, Delhi.
3. L. M. Bhole: Financial Institutions and Markets, TMH, 2012.
4. M. Y. Khan: Financial Services, TMH, 2012.
5. Dr. Vasanth Desai, 2013, Financial Markets and Financial Services, Himalaya Publishing House, Mumbai.
6. M Y Khan, “Financial Services”, TMH, 5th edition
7. Shashi K. Gupta, Nisha Aggarwal and Neeti Gupta, “ Financial Services”, Kalyani Publishers, 6th Revised Edition
8. Bhatia, B.S., and Gupta G.S., Management of Financial Services, Deep and Deep, New Delhi.
9. Ghosh, P.K., and Gupta, G.S., Fundamentals of Lease Financing, Vision Publishers, New Delhi.
10. Gupta, S.K., and Nisha Aggarwal, Financial Services, Kalyani Publishers, New Delhi.
11. Nalini Prava Tripathy, Financial Services, Prentice Hall of India Pvt. Ltd., New Delhi.
12. Guruswamy, S., Financial Services and Markets, Thomson Learning, Singapore.
13. Anbarasu Joseph D, Boominathan VK, Mohan Man, Gnanaraj G, “Financial Services”, S.Chand Publications
14. V.A.Avadhani, “ Financial Services in India”, HPH

Course-Code	Course Title			Core/ Elective		
P23MB311	ADVERTISING AND RETIAL MANAGEMENT (MARKETING)			Elective-II		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	4

**Course Objectives:**

The objectives of this course are;

1. To sensitize students on various dimensions of the promotion mix
2. To help gain an understanding of the role of advertising in marketing
3. To explore the various elements relating to an effective advertising strategy
4. To introduce the concept of organized retailing
5. To help understand the various functions & roles of retailing in India

**Course Outcomes:**

After reading this course you should be able to;

1. Understand the importance of advertising in the marketing mix
2. Establish the importance of creativity in an ad campaign
3. Determine the comparative importance of organized retailing sector vis-a- vis unorganized sector
4. Compare the functions and performance of organized retail sector to others
5. Determine the role of other functional areas of marketing as key drivers to the retail sector

**Unit-I:**

Advertising – Role in promotion mix, Objectives of advertising, Creativity in advertising, Ad-copy, Creative strategy & process – Implementation & evaluation, DAGMAR, Types of ad appeals, Ad budget – Establishment & allocation, Budgeting approaches

**Unit- II:**

Media planning, Deciding media objectives – Media strategy, Media mix, Ad reach Vs. Frequency, Evaluation of media, Internet and interactive media, Role of technology in media, Media planning, Role of Technology in media planning, Measuring ad effectiveness, Copy testing

**Unit – III:**

Introduction to organized retailing, Trends in retail, Types of retail format, Behaviour of organized retail markets, Objectives and function of retailing, retailing in India

**Unit- IV:**

Retailing in rural India, Geographic spread of Indian retail sector, Organized & unorganized, Types of retail formats, Retailing in services sector, International retailing, Cultural challenges in International retail, Role of MNC's

## **Unit – V**

CRM in retail, Retail pricing strategies – Key drivers, Merchandising management, Store management, visual merchandising – Logistics management, Developing retail CRM programmes, Legal & ethical concerns in organized retail

### **Suggested Readings:**

1. Aaker, David A, Advertising Management 4th edition, PHI
2. Bajaj Tuli Srinivatsava , Retail Management, 3rd Edition, Oxford Publication

### **Suggested Books**

1. Belch, George E and Blech, Michael A, Advertising and promotion, Tata McGraw Hill,
2. Ogilvy David, Ogilvy on Advertising , Longeman, London
3. Chunawalla, S.A., Advertising , Sales and Promotion Management Himalaya Publishing House.
4. Mohan, Mahendra, Advertising Management, Tata Mcgraw Hill
5. Levy & Weitz, Retailing Management, Tata McGraw Hill
6. Bary Berman & Evans, Retail Management- A Strategic Approach, Pearson education
7. Akileshwar Pathak, Legal Aspects of Business, Tata McGraw Hill
8. Nicholas Alexander, International Retailing, Blackwell Basin Publishers Ltd
9. Dr.Harjith Singh, “Retail Management: A Global Perspective, Texts and Cases” S.Chand
10. S.A.Chanuwalla and KC.Sethia, “ Foundations of Advertising- Theory and Practice”, HPH



Course-Code	Course Title			Core/ Elective		
P23MB312	INDUSTRIAL RELATIONS AND LABOUR LAW (HUMAN RESOURCES)			Elective-II		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objective:**

- 1) This course intends to make the management students aware of the various actors as part of the industrial relations such as the state, ILO, trade unions and so on.
- 2) The course focuses on the managerial perspectives needed to understand industrial relations issues, labour laws, issues and implications.
- 3) Critically analyze reforms in labour legislation over labour codes.

**Course Outcomes:** By the end of the course, the students would:

1. Gain a comprehensive understanding of Industrial relations in the wake of economic reforms.
2. Gain knowledge of industrial disputes and a framework for analysis and resolution of such disputes.
3. Understand the role of trade unions and generate alternate decision making.
4. Appreciate Labour laws related to labour welfare, social security and other protective laws towards women labour, migrant labour and contract labour

**Unit – I: INDUSTRIAL RELATIONS**

Industrial relations- Meaning, Concept and objectives; Changing roles of actors - Workers, Management & Government in industrial relations; Approaches to Industrial Relations - System approach (Dunlop's), Social Action Approach, input – output Approach; Conditions for good Industrial Relations, Economic Reforms and status of IR in India, Industrial Relations code 2020.

**Unit – II: INDUSTRIAL DISPUTES AND RESOLUTION**

Management of Discipline - The Industrial Employment (*Standing Orders*) Act, 1946; Industrial Disputes - Meaning, nature, causes, extent and methods of settling industrial disputes; Industrial Disputes Act, 1947; Alternate Dispute Resolution Strategies - Collective Bargaining, Negotiation, Conciliation/Mediation, Adjudication and Voluntary Arbitration; Management of Industrial Cooperation - Labour Management co-operation, Workers' Participation in Management and Industrial Democracy.

**Unit – III: TRADE UNIONISM: HISTORICAL & LEGAL FRAMEWORK**

Trade Unionism - Objectives and Functions of Trade Unions; Trade Union Movement in India - History and growth of Trade Union in India – Trade Unions in Pre and Post - independence Period; Trade Unions Act, 1926; Challenges of Trade Unions in India, Changing industrial environment and Role Trade Unions in Globalized economy.

#### **Unit – IV: LABOR LEGISLATION IN INDIA (Part-1)**

Labour Legislation - History and growth of labour legislation in India; International Labour Organization (ILO) – Activities of ILO, Impact of I.L.O. on Indian Labour standards; Labour Welfare and Social Security – Meaning, Concept and Principles of Labour Welfare, Approaches to Labour Welfare, Indian Constitution & Labour Welfare and National Commission on Labour recommendations on Labour Welfare; Meaning, Evolution, institutional growth and need of social security and concept of employer's Liability; Salient features of Welfare and security legislations for organized and unorganized workers in India, Code on Social Security, 2020;

#### **Unit – V: LABOR LEGISLATION IN INDIA (Part-2)**

Women and Labour law - The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, Supreme Court verdict in Vishaka Versus State of Rajasthan case; Protective Labour Legislation in India – Inter State Migrant Workmen (Regulation of Employment & conditions of Service) Act, 1979; Salient features of Occupational safety, Health and Working Conditions code, 2020; Contract Labour (Regulation & Abolition) Act, 1970; Labour Law reforms initiative in India – The Code on Wages, 2019; The Occupational Safety, Health and Working Conditions Code, The Code on Social Security, The Industrial Relations Code.

#### **Essential Readings**

1. New Labour and Industrial Laws, 2020, Taxmann Publications, New, Delhi.
2. Mishra, SN, Labour and Industrial Laws, 2018, Central Law Publications.
3. Ghosh, P and Nandan, S, 2015, Industrial relations and Labour Laws, Mc Graw Hill Publishers.
4. Goswami, V.G., 2015, Labour and Industrial Laws, Allahabad, Central Law Agency
5. Srivastava, SC, 2012, Industrial Relations and Labour Laws, Vikas Publications, New Delhi,
6. C.S Venkata Ratnam, “Industrial Relations”, 2009, Oxford University Press, New Delhi.
7. S.C.Srivatsava, “Industrial Relations and Labour Laws, 8e, S.Chand Publications
8. Sharan, “ Industrial Relations and Labour Laws at Glance, Shroff Publications

#### **Suggested Readings**

1. Sukomal Sen, 1997, “Working Class in India, History of Emergence and Movement (1830-1990)”, National Book Agency, Kolkata.
2. Srivastava, S.C, “Industrial Relations and Labour Laws”, 5th Rev., Vikas Publication House, New Delhi, 2006
3. Singh B.D, 2008, “Industrial relations and labor laws”, Excel books.
4. P.K.Padhi, 2009, “Labour and Industrial Laws”, PHI Learning Pvt. Ltd.

Course-Code	Course Title			Core/Elective		
P23MB313	BUSINESS ANALYTICS (SYSTEM)			Elective-II		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. The objective is to provide knowledge of data science
2. To provide basic statistical tools
3. State the importance of data in current business scenario
4. To develop contingent business models for better analysis

**Course Outcomes:**

1. Students can use data as tool for business analysis
2. The basic statistics provides a road map to learners
3. Micro metrics makes the students to identify data gaps
4. The business models may help in better decision making

**Unit – I: Introduction to Business Analytics:**

Definition of Business Analytics, Categories of Business Analytical methods and models, Business Analytics in practice, Big Data - Overview of using Data, Types of Data- Business decision modeling.

**Unit – II: Descriptive Analytics:**

Overview of Description Statistics (Central Tendency, Variability), Data Visualization - Definition, Visualization Techniques – Tables, Cross Tabulations, charts, Data Dashboards using Advanced Ms-Excel or SPSS.

**Unit – III: Predictive Analytics:**

Trend Lines, Regression Analysis – Linear & Multiple, Predictive modeling, forecasting Techniques, Data Mining - Definition, Approaches in Data Mining- Data Exploration & Reduction, Data mining and business intelligence, Data mining for business Classification, Association, Cause Effect Modeling.

**Unit – IV: Prescriptive Analytics:**

Overview of Linear Optimization, Non Linear Programming Integer Optimization, Cutting Plane algorithm and other methods, Decision Analysis – Risk and uncertainty methods - Text analytics Web analytics.

**Unit – V: Programming Using R:**

R Environment, R packages, Reading and Writing data in R, R functions, Control Statements, Frames and Subsets, Managing and Manipulating data in R.

**Suggested Books:**

1. Camm, Cochran, Fry, Ohlmann, Anderson, Sweeney, Williams - **Essentials of Business Analytics**, Cengage Learning.
2. James Evans, **Business Analytics**, Pearson, Second Edition, 2017.
3. Albright Winston, **Business Analytics - Data Analysis - Data Analysis and Decision Making**, Cengage Learning, Reprint 2016.
4. Sahil Raj, **Business Analytics**, Cengage Learning.
5. Jank Wolfgang, "Business Analytics for Managers", Springer
6. Prema Alla, Introduction to Data Science Using R, BS Publications
7. Sharaff Aakanksha, Data Science and Its Applications, Taylor & Francis

Course-Code	Course Title			Core/Elective		
P23MB314	TEXT,WEB AND SOCIAL MEDIA ANALYTICS (BUSINESS ANALYTICS)			Elective-II		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:** The Objectives of the Course are:

1. To provide an overview of common text mining and social media data analytic activities.
2. To understand the complexities of processing text and network data from different datasources.
3. To enable students to solve complex real-world problems for sentiment analysis and Recommendation systems.

**Course Outcomes:** After Completion of the Course, Students will be able to:

1. Interpret the terminologies, metaphors and perspectives of social media analytics.
2. Apply a wide range of classification, clustering, estimation and prediction algorithms on Textual data.
3. Perform social network analysis to identify important social actors, subgroups and network properties in social media sites.
4. Apply state of the art web mining tools and libraries on realistic data sets as a basis for business decisions and applications.
5. Provide solutions to the emerging problems with social media such as behaviour analytics and Recommendation systems.
6. Design new solutions to opinion extraction, sentiment classification and data summarization problems.

**Unit – I:**

**Introduction to Text Mining and Mining Textual Data**

Text Representation- **tokenization**, stemming, stop words, TF-IDF, Feature Vector Representation,NER,N-gram modeling.

Text Clustering, Text Classification, Topic Modeling-LDA,HDP

**Unit – II:**

**Introduction to Web-Mining and Web Usage Web content Mining**

Inverted indices and Booleanqueries.PLSI,Query optimization, pageranking.

**Unit – III:**

**Introduction to Social Media Network**

Essentials of Social graphs, Social Networks, Models, Information Diffusion in Social Media.

**Unit – IV:**

**Mining Social Media and Sentimental Mining**

Behavioral Analytics, Influence and Homophily, Recommendation in Social Media

Sentiment Classification ,feature based opinion mining, comparative sentence and relational mining, Opinion spam.

**Unit – V:**

## **Recent Trends**

Recent Trends in Text, Web and Social Media Analytics

### **Suggested Books:**

- 1.1 BingLiu, “WebDataMining- ExploringHyperlinks,Contents,andUsageData”, Springer, Second Edition, 2011.
2. RezaZafarani, MohammadAliAbbasiandHuanLiu, “SocialMediaMining- AnIntroduction”, Cambridge University Press, 2014.
3. Bing Liu, “Sentiment Analysis and Opinion Mining”, Morgan & Claypool Publishers, 2012.
4. NitinIndurkha, FredJDamerau, “HandbookofNaturalLanguageProcess”, 2ndEdition, CRC Press, 2010.
5. Matthew A. Russell, “Mining the social web”, 2nd edition- O'Reilly Media, 2013.

Course-Code	Course Title			Core/Elective		
P23MB315	INNOVATION AND DESIGN THINKING ( ENTREPRENEURSHIP)			Elective-II		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

- 1) To understand the importance and process of Innovation.
- 2) To delve deep into the concept of design thinking and its practical application in a business context.
- 3) By the end of these units, managers should be able to effectively utilize design thinking to identify problems, generate creative solutions, and implement impactful business innovations.

**Course Outcomes:**

- 1)To inculcate the concepts of creative thinking, design thinking and innovation.
- 2)Develop the students as a good designer by imparting creativity and problem-solving ability
- 3)Implement creative and design thinking to come up with an effective innovation.
- 4)Being able to identify problems and apply design thinking to come up with solutions.
- 5)Use design thinking to develop innovative products that bring business impact.

**Unit 1: Introduction to Innovation:**Meaning and differences innovation and creativity, Characteristics, Importance, Principles of Innovation, Process of Innovation, Types of innovation, strategic advantages of innovation, innovation adoption and diffusion model.

**Unit 2: Innovation in management:** Macroscopic view of innovation, approaches to innovation, assumptions and barriers in innovation, push and pull innovation, TRIZ Theory, SCAMPER Technique, SWOT analysis, organizational aspects of innovation, success factors in innovation management.

**Unit 3: Fundamentals of Design Thinking –**

New Product Development: New product life cycle, linking engineering, technology and management for innovation, innovation platform, industrial design concepts for a product.

Introduction to design thinking: principles, stages, and key methodologies

Emphasis on the human-centered approach to design thinking

The importance of empathy in understanding customer needs and experiences

Techniques to define problems in a user-centric manner

**Unit 4: Ideation, Prototyping, and Testing**

Understanding the ideation phase: Techniques to stimulate creativity and brainstorm innovative solutions

Introduction to prototyping: Principles, methodologies, and hands-on exercises

The role of testing in design thinking: Techniques to test prototypes and validate ideas effectively Interpreting feedback and refining the solution: Iteration process in design thinking

Case studies demonstrating successful ideation, prototyping, and testing stages

**Unit 5: Implementing Design Thinking for Business Impact** Tools for design thinking, The transition from design thinking to implementation in the business context -How to use design thinking to develop innovative products and services - Strategies for scaling design thinking in an organization and maintaining an innovative culture - Design thinking's role in driving business growth and transformation - design thinking and innovation for sustainability -Case studies of innovative products developed through design thinking highlighting the business impact.

### **Suggested Books**

John.R. Karsnitz, Stephen O'Brien and John P. Hutchinson, "Engineering Design", Cengage learning (International edition), second edition, 2013. Roger Martin, "The Design of Business: Why Design Thinking is the Next Competitive Advantage", Harvard Business Press, 2009. Product Design and Development-Karl T Elrich-sixth edition-McGraw Hill publications Hasso Plattner, Christoph Meinel and Larry Leifer (eds), "Design Thinking: Understand – Improve-apply" Springer, 2001.

1. Tim Brown, Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation, HarperCollins Publishers Ltd.
2. Idris Mootee, Design Thinking for Strategic Innovation, John Wiley & Sons Inc
3. Brenda Laurel, Design Research methods and Perspectives, MIT press 2003
4. Yves Pigneur, Alexander Osterwalder, Business model generation: A handbook for visionaries, game changers and challengers, Wiley
5. Don Norman, "The Design of Everyday Things, Basic Books
6. Todd, Zaki Warfel, "Prototyping: A Practitioner's Guide," Rosenfeld Media
7. Eric Ries, "The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses," Currency
8. Michael G Luchs, K Scott Swan, Abbie Griffin, Design Thinking WILEY
9. Thomas Lockwood, Design thinking Integrating Innovation, Customer Experience, and Brand Value, Allworth Press



**LORDS INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
**(An Autonomous Institution)**  
**(With effect from the Academic Year 2024-25) - LR23 Revised**  
**Department of Management Studies**  
**MBA Year-II Semester-IV**

S.No.	Course Code	Course Type /Code	Course Title	Scheme of Instructions			Scheme of Examination			Credits	
				L	T	P	Contact hours per week	CIE	SEE		Duration in of SEE in Hrs
<b>Theory Course</b>											
1.	P23MB401	CORE	Business Process Reengineering	4	1	-	5	40	60	3	5
2.	P23MB402	CORE	Logistic and Supply Chain Management	4	1	-	5	40	60	3	5
3.	P23MB403	CORE	Business Intelligence	4	1	-	5	40	60	3	5
<b>Discipline Specific Elective – III</b>											
4.	P23MB404	DSE	Banking and Insurance (Finance)	4	1	-	5	40	60	3	5
	P23MB405		Buyer Behavior (Marketing)	4	1	-					
	P23MB406		Leadership and Change Management (Human Resource)	4	1	-					
	P23MB407		Data Visualization (Systems)	4	1	-					
	P23MB408		Python Programming (Business Analytics)	4	1	-					
	P23MB409		Technology for Entrepreneurs (Entrepreneurship)	4	1	-					
<b>Discipline Specific Elective – IV</b>											
5	P23MB410	DSE	International Finance (Finance)	4	1	-	5	40	60	3	5
	P23MB411		Services & Digital Marketing (Marketing)	4	1	-					
	P23MB412		Performance Management (Human Resource)	4	1	-					
	P23MB413		Data Mining for Business (Systems)	4	1	-					
	P23MB414		Introduction to Power BI (Business Analytics)	4	1	-					
	P23MB415		Social Entrepreneurship (Entrepreneurship)	4	1	-					
<b>Project Work</b>											
6.	P23MB4P1	PROJ	Project Work ***	-	-	3	6	50	100	-	3
7.	P23MB4P2	PROJ	Comprehensive Viva Voce****	-	-	-	-	-	100	-	3
<b>TOTAL</b>				<b>44</b>	<b>11</b>	<b>3</b>	<b>31</b>	<b>250</b>	<b>500</b>	<b>15</b>	<b>31</b>

**L:** Lecture(Hrs/Wk/Sem) **T:** Tutorial (Hrs/Wk/Sem) **P:** Practical

**CIE:** Continuous Internal Evaluation

**SEE:** Semester End Examination

**DSE:** Discipline Specific Elective

**PROJ:** Project work

**Note:**

\*\*\* All Students has to continue Project Work Synopsis Dissertation and submit a Final Project Work\*\*\*

\*\*\*\* A Comprehensive Viva Voce Examination will be conducted at the end of Fourth Semester\*\*\*\*

1. Each contact hour is a Clock Hour.
2. The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

<b>1</b>	<b>Total Credits for Two years</b>	<b>124</b>
<b>2</b>	<b>Total Marks</b>	<b>2700</b>

Course Code	Course Title				Core/Elective	
P23MB401	BUSINESS PROCESS REENGINEERING				Core	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. Providing the learners with contemporary concepts in Business Process Reengineering
2. Enabling the learners to understand various tools and techniques in BPR
3. Understanding the importance of BPR in assisting organizational effectiveness and the related drivers

**Course Outcomes:**

1. Learners will be enabled with holistic perspective of BPR in the contemporary context
2. Learners will be able to understand the current trends and methodology of BPR
3. Learners will be able to understand the dynamics of BPR in Industry 4.0 scenario

**Unit-I- Introduction to Business Process Reengineering**

Historical background and evolution of BPR, Definition and principles of BPR, Importance and benefits of BPR in organizations,introduction to Industry 4.0-A paradigm shift from manufacturing context to services

**Unit-II - Design thinking and innovation strategies in BPR**

Need of Innovation in BPR projects, Applying design thinking to process innovation,Aiming cost reduction with optimization techniques, BPR vs. continuous improvement approaches, Process mapping and modelling techniques

**Unit-III-Technology and digital transformation**

Role of technology in BPR, Technology -Anessential imperative, Automation and usage of advanced tools and technology, Industry 4.0–An era of data driven decision making,Dynamic Analysis,Realtime analysis, Role of ERP, Predictive analytics: Machine learning in process optimization and automation,Data analytics and Data science, Role of automation tools – Power BI, Tableau,UI Path and Blueprism, Challenges and contemplations in implementing new technologies

**Unit-IV Organizational culture and change management**

Building resilient frame work with robust road map , Managing resistance to change in BPR, Building a culture of continuous improvement,Role of TQM in BPR,Having a wider Approach -From process improvementsto organizational improvements, KPIs and balanced scorecard, Role of leadership in driving successful BPR initiatives Project management –An indispensable constituent, Projectmanagement tools, Agile methodology,Strategies for effectivecommunication and negotiation

**Unit-V Operational factors in BPR:**

Role of ethics in BPR -Leadership context, Social and environmental responsibility in BPR Targeting green BPR approach, Balancing efficiency with social impact , Corporate Social

Responsibility , Competitive world and disruptive environment, lessons in BPR, Timelines in BPR , Skill issue of consultants , Documentation in BPR

**Suggested Readings:**

1. Michael Hammer , James Champy,"Reengineering the Corporation"Harper Collins publications 2014
2. MichaelHammer"Beyond Reengineering: How the Process-Centered Organization is Changing Our Work and Our Lives",Harper Collins publications
3. Robert J. Howlett, Lakhmi C. Jain,"Smart Innovation, Systems and Technologies, Springerpublication2017
4. Mark O.George, "The Lean Six Sigma Guide to Doing More With Less: Cut Costs, Reduce Waste, and Lower Your Overhead" Wiley publication
5. Joseph M. Juran,"Juran's Quality Handbook: The Complete Guide to Performance Excellence" Jaico Books 2015
6. Samir Parikh,"The Consultant's Handbook: A Practical Guide to Delivering High-value and Differentiated Services in a Competitive Marketplace,Springer Books
7. James M. Kouzes and Barry Z. Posner "The Leadership Challenge: How to Make Extraordinary Things Happen in Organizations" Google books
8. Daniel H. Pink, "Drive: The Surprising Truth About What Motivates Us" Utah press publication
9. Andrew Roberts, "Leadership in War" Riverhead Hardcover, 2019
10. Eric Ries,"The Lean Start-up: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses"Random House

Course-Code	Course Title			Core/ Elective		
<b>P23MB402</b>	<b>LOGISTICS AND SUPPLY CHAIN MANAGEMENT</b>			Core Course		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course objectives:**

1. To understand the fundamental operations of logistics and supply chain management.
2. To apply the knowledge and principles of management of cross functional areas for effective Logistics and supply chain management.
3. Understand the strategic issues and multi-level linkages in logistics management.

**Course Outcomes:**

After reading this course one should be able to

1. Gain a holistic understanding of logistics and supply chain management and the role of Logistics management in SCM
2. Understand the basic drivers that lead to the performance of LSM in effective manner.
3. Gain an insight into the role of Information Technology and recent trends in making supply chains more efficient.

**Unit-I: Logistics Management-Introduction**

Introduction to logistics, meaning of logistics management, objectives, Evolution of logistics management, concept, functions of logistics management, Role of logistics in supply chain management, difference between logistics and supply chain management, 3PL,4PL

**Unit-II: Importance of Logistics Management**

Inbound and outbound logistics, Integrated logistics management, Reverse logistics, Logistics planning and strategy, Role and importance of transportation in logistics, Transportation formats, Factors influencing their choice.

**Unit III: Supply Chain Management**

Concept, Objectives and Functions of SCM, Evolution of supply chain with respect to its origin, Conceptual framework, Supply chain strategy and structure, Steps in supply chain management, Drivers enhancing effectiveness of supply chains, Value chain, Value delivery systems

**Unit-IV: Managing supply chains**

Bull-Whip Effect, Measures of supply chain performance, Warehousing-Types of warehousing, Warehousing operations, Warehouse Management Systems, Role of Distribution Centers, Supplier integration- Forward integration, Backward integration, Diversification, Global supply chains

**Unit-V: Recent trends in SCM:**

Role of IT in SCM, Lean Supply Chains, Digital supply Chains, Green Supply Chains, Circular Supply Chains, Agile Supply Chains, FMS, RFID, Bar coding, Trends in supply chain management

### **Suggested Readings:**

1. Shah, J, "Supply Chain Management", 2009, 1st Edition, Pearson Education
2. Shridhara Bhat, K "Logistics and Supply Chain Management", 2017, Himalaya Publishing House.
3. Crandall, Richard E & others, "Principles o Supply Chain Management", 2010, CRC Press.
4. Mohanty, R P and Deshmukh S.G, "Essentials of Supply Chain Management", 2009, 1st Ed Jaico,
5. Chandrasekaran. N, "Supply Chain Management process, system and practice", 2010, Oxford, 1st Ed.
6. Altekar, V. Rahul, "Supply Chain Management", PHI, 2005
7. Leenders, Michiel R and others, "Purchasing and Supply Chain Management", 2010, TMH.
8. Coyle, J.J., Bardi E.J. Etc., "A Logistics Approach to Supply Chain Management", 2009 Cengage,
9. Ling Li, "Supply Chain Management: Concepts, Techniques and Practices", 2009, 1st Ed Cambridge.
10. Kachru Upendra, "Exploring the Supply Chain Theory and Practice", 2009, Excel books.

Course-Code	Course Title				Core/ Elective	
<b>P23MB402</b>	<b>BUSINESS INTELLIGENCE</b>				Core Course	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:** The Objectives of the Course are:

1. To provide knowledge of Business Intelligence tools that can be used for Decision-making in an Organization
2. To familiarize Students on Data Warehousing Concepts, Data Mining Techniques and understand relationships between the underlying Business Processes of an Organization.
3. To provide knowledge on Prescriptive Analytics and its types, and the various applications of Business Analytics on different Domains.

**Course Outcomes:** After Completion of the Course, Students will be able to:

1. Understand the basic Concepts of Business Analytics in an Organization.
2. Establish the Data Warehousing Mechanism.
3. Experiment various methods of Visualization and Data mining methods.
4. Compare and contrast among Descriptive, Predictive and Prescriptive Analytics.
5. Practice the application of Business Analytics in different domains.

### Unit I

#### Introduction to Business Intelligence (BI)

Definition, History and Evolution, Styles of Business Intelligence, Benefits of Business Intelligence, Real-time Business Intelligence, Business Intelligence Value Chain, Architecture Business Intelligence.

### Unit II

#### Data Warehousing and Data Mining

- a) Data Warehousing (DWH): - Definition, Characteristic, types, Data ware housing framework, DWH 3 tier architecture, Alternative Architectures, Data ware housing Integration, Data ware housing- Development Approaches, Real time Data ware housing.
- b) Data Mining :- Definition, Characteristic, Benefits, Data Mining Functions, Data Mining Applications, Data Mining techniques and tools. Text Mining, Web Mining.

### Unit III

#### Business Performance Measurement (BPM)

Definition, BPM vs BI, Summary of BPM Process, Performance Measurement, BPM Methodologies, BPM Architecture and Applications, Performance Dash boards.

### Unit IV

#### Business Analytics and Data Visualization

- a) Business Analytics - Definitions, Tools and techniques of BA, Advanced Business Analytics Business Analytics and Web, Usage, Benefits and Success of Business Analytics.
- b) Data Visualization: Definition, New Direction in Data Visualization, GIS, GIS vs GPS

## **Unit V**

### **Business Intelligence Implementation**

- a) Implementing Business Intelligence – Implemental Factors, Critical Success factors of Business Implemental, Managerial Issues related to BI Implementation. Business Intelligence and Integration Implementation – Types, Need, Level of Business Intelligence Integration.
- b) Emerging trends in Business Intelligence Implementation- Social Net works and Business Intelligence, Collaborative Decision Making, RFID and Business Intelligence, Reality Mining.

### **Suggested Readings:**

1. Business Intelligence-A Managerial Approach, Turban, Sharada, Delen, King- Pearson - Second Edition-2014.
2. Decision Support and Business Intelligence Systems -Turban, Aaronson, Liang, Sharada-Pearson, and latest Edition.
3. Successful Business Intelligence, Cindi Howson, McGraw Hill Education-Indian Edition.
4. Business Intelligence- A hands on approach by N. Rajeshwari, 1st Edition, PHI
5. Ramesh Sharda, Turban E, Business Intelligence and analytics, 10th Edition, Pearson Books
6. Bernard Marr, “Data strategy” Kogan Page publishing
7. Anoop V K Kumar, “Business Intelligence demystified” 1st edition 2022, BPB publications
8. Jarke M, Fundamentals of Data Warehousing, 2nd edition Springer India publication
9. Paulraj Ponniah, Data warehousing fundamentals for IT professionals, 2nd edition , John Wiley books
10. Lather A S, Anil K Saini “Business Intelligence and data warehousing” 2018, Narosa publication



Course-Code	Course Title				Core/Elective	
P23MB404	BANKING AND INSURANCE (FINANCE)				Elective-III	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. To provide an overview of the structure of banking and insurance business in India.
2. To describe the products and services in Banking and Insurance
3. To highlight the regulatory changes and innovations in the Banking and Insurance sectors.
4. To prepare students for career opportunities in banking and insurance

**Course Outcomes:**

After studying this course the student will be able to

1. Learn about the performance of banks in India
2. Learn about the sources and uses of bank funds
3. Understand the role and importance of insurance, its types, principles, and regulation
4. Understand the latest innovations in banking system

**Unit-I: Introduction to Banking:**

Structure of Indian Banking system- scheduled commercial banks, foreign banks; commercial banks versus payment banks; Types of banking –universal banking, wholesale banking, private banking, retail banking; Evolution of Banking in India-nationalization, banking reforms: financial intermediation by banks; Role of commercial banking and economic development.RBI, Banker-Customer relationship. Functions of a Bank, Banking Sector and organization of Banks: Different types of accounts. Various services offered by banks, Sources of risk in banks; Analyzing banks' financial statements

**Unit-II: Uses of Bank Funds:**

Features or Bank Credit, Different types of accounts. Steps to be followed in the assessment of creditworthiness or a prospective borrower, The credit process and management, Different types of loans and their features, Loan Pricing: The basic model, pricing of fixed & floating rate loans, cost-benefit loan pricing, Customer Profitability Analysis, NPAs:- concept of gross and net NPAs, causes, implications & recovery of NPAs. Priority sector lending.

**Unit-III: Regulation and Innovations in Banking System:**

Regulation of Bank Capital: The need to regulate Bank Capital, Concept of Economic Model, Concept of Regulatory Capital, Basel Accords I, II and III: Banking innovations:- Core Banking Solution, Retail Banking-Products & Services - Nature, Scope, Future and Strategies, Plastic Money, National Electronic Funds Transfer, ATM, Mobile Banking, M-Wallets, Net Banking; Bancassurance; Payment & Settlement systems in Banks-Clearing and Gateways.

**Unit-IV: Introduction to Insurance:**

Definition and nature of Insurance, Role and importance of Insurance, History and Development of Insurance, Risk Management and the Role of Insurance, Features of insurable risk; Principles of insurance; Legal aspects of Insurance Contract, Functions of Insurers, Types of Insurers, Reinsurance, Prospects of Insurance Companies, Overview of IRDA.

**Unit-V: Life Insurance and General Insurance:**

The concept of Life Insurance, Life Insurance Products-Traditional and Market Related, Pension Plans, Group Insurance, Insurance for the under privileged; Tax treatment of Life Insurance; Claims settlement, Distribution channel Marketing intermediaries; General insurance types - Health and accident, Motor, Fire, Credit and crop.

**Suggested Books:**

1. Introduction to Banking, Vijayaragavan Iyengar, Excel Books, 2009.
2. Banking and Insurance, O.P.Agarwal,Himalaya Publishing, 2010.
3. Bank Management & Financial Services, Peter.S.Rose & Sylvia. C. Hudgins, Tata McGraw Hill 2010, 7th Edition.
4. Bank Financial Management, IIBF, Macmillan 2010.
5. Management of Banking & Financial Services, Padmalatha Suresh & Justin Paul, Pearson, 2nd Edition.
6. Fundamentals of Risk & Insurance, Emmett J. Vaughan & Therese M. Vaughan, Wiley, India Edition 2003, 9th Edition.
7. Indian Insurance-A Profile,H. Narayanan,JaicoPublishingHouse,2008.
8. Risk Management&Insurance,S.Arunajatesan,T.R.Viswanathan,MacMillan2009.
9. Introduction to Risk Management& Insurance, Mark. S.Dorfman, Prentice-Hall of India Private Limited-2007, 8th Edition
10. Insurance-Principles and Practice,M.N.MishraandS.B.Mishra,S.Chand,16'hEdition.

Course- Code	Course Title			Core/ Elective		
<b>P23MB405</b>	<b>BUYER BEHAVIOUR (MARKETING)</b>			<b>Elective-III</b>		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. The main objective of this course is an introduction to the world of buyer behavior.
2. The discipline borrows from several social sciences including psychology, sociology, and anthropology to explain behavior in the marketplace.
3. This course will explore how perceptions, learning, memory, personality, and attitudes influence consumption behavior.
4. It establishes the relevance of buyer behavior theories and concepts to marketing decisions.

**Course Outcomes:**

1. Students can examine and identify the major influences in buyer behavior
2. Students can develop an understanding between different consumer behavior influences and their relationships.
3. To enable students in designing and evaluating the marketing strategies based on fundamentals of consumer buying behavior.

**Unit - I: Understanding Buyer Behaviour**

Introduction to buyer behaviour, Contemporary dimensions of buyer behaviour, Buyer behaviour research process, Concepts and theories of motivation marketing implications, Motivation and buyer behavior, motives and motivation theories, personality and its role in buyer behavior.

**Unit - II: Components of buyer behaviour**

Perception and Learning Theory: Introduction, meaning, nature, Importance and limitation of perception, Theories of buyer behavior, its role in Learning principles and their marketing implications. Concepts of conditioning, important aspects of information processing theory, encoding and information retention, Retrieval of information

**Unit - III: Role of culture and groups**

Impact of culture on buyer behaviour, Social and cultural settings, Meaning of culture, Characteristics of culture, Functions of culture, Types of culture, Sub-culture and cross cultural marketing practices, Reference groups and family life cycle, Advantages and disadvantage of reference groups, Types of reference groups. Role of family life cycle in buyer behaviour

**Unit - IV: Attitude and buyer decision process**

Consumer decision making and buyer attitude: Information search, evaluation of alternatives. Steps between evaluation of alternatives and purchase decision, Post-purchase behaviour,

Attitude and consumer behaviour, Meaning of attitude, nature and characteristics of attitude, Types of attitude, Learning of attitude, Sources of influence on attitude formation

**Unit - V: Models of Buyer behaviour**

Models of buyer behaviour: Modeling behavior, Traditional models, Contemporary models, Generic models of buyer behavior, Howard Sheth model, Engel Blackwell model and Rao-Lilien model, Consumerism

**Suggested Readings:**

1. Schiffman and Kanuk, "Consumer Behavior", 2004, Pearson Education / PHI.
2. Black-well, R. Miniard PW and Engel, "Consumer Behavior", 2005, Thomson Learning.
3. Loudon and Della Bitta, "Consumer Behavior", 2004, TMH.
4. Dinesh Kumar Consumer Behavior, 2014, oxford University Press.
5. Gary Lilien, "Marketing Models", 2000, PHI.
6. Suja R. Nair, "Consumer Behaviour in Indian perspective", 2010, HPH.
7. Shethand Mittal, "Consumer Behavior", 2004, Thomson Learning.
8. Satish Batra, "Consumer Behavior", 2009, Excel Books New Delhi.

Course- Code	Course Title				Core/ Elective	
<b>P23MB406</b>	<b>LEADERSHIP AND CHANGE MANAGEMENT (HUMAN RESOURCE)</b>				<b>Elective-III</b>	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	4

**Course Objectives:**

1. To have conceptual foundation to read change in organizations
2. To understand how culture differences impact leadership and change processes
3. To understand methods for monitoring the progress of change initiatives

**Course Outcomes:**

1. Gain knowledge and understanding of different leadership styles and models.
2. Familiarize with the drivers, methods and model of change.
3. Develop cultural competence in the context of Global organizations and diverse teams

**Unit - I: Introduction to leadership:**

Traits, Styles, Skills, Behaviors, Vision, Inspiration and momentum of leadership- International Framework for analyzing leadership, Personality types and leadership, Five factor model of personality, Leadership perspectives on cultural values, Responsibility and organizational performance, Current issues contemporary Leadership styles.

**Unit - II: Leadership development programs and models:** Characteristics, Types and evaluation of leadership development, Efforts-trait, Behavior, Power influence, Situational and integrative approaches to leadership, Causal and normative models - Leader-member exchange theory, LPC model-VIM of self- leadership perspectives on change, Contingency, Resource dependence, Population ecology and institutional.

**Unit - III: Strategic change process:**

Hopson's change curve, Virginia Satir change model, Noer's redundancy intervention model-change path diagnostics, Reactive and proactive change Path-Nabisco's Renewal Path, Diagnostic models for organizational change, Methods for dealing with resistance to change, Enablers and barriers to change, Model of cognitive, Effective and behavioral responses to change, Five stages of planned change.

**Unit - IV: Initiating change:**

Weinberg's change process, triggers, drivers and tracers of change - Leavitt model-change mapping, change spectrum, Gestalt change cycle - Tropics Test, Behavioral, cognitive, psycho - dynamic and humanistic approaches to change, Bechard's change formula - Buchanon and McCalman's model of perpetual transit in management - Types of individual, group and organizational change, Organizational change matrix.

**Unit - V: Methods and models for change management:**

Warfield 6-3-5 method Rosemary Stewart's model - Tony Buzan's mind maps - Edward de Bono's six thinking hats - Johari window - Nadler and Tushman's congruence model -

Scenario analysis - power - interest matrix - Kotler's 8 step change model Pendlebury, Nadler, Kanter and Taffinder's planned change models, Dunphy Contingency Model of change.

**Suggested Readings:**

1. Cameron & Green, " Making sense of change management", 2009, Kogan page.
2. Peter G. Northouse, "Leadership", 2010, Sage.
3. Peter Lorange, "Thought leadership", Meets Business", 1st edition, 2009, Cambridge
4. John ADAIR, "Inspiring Leadership", 2008, Viva Books.
5. Gary Yukl, "Leadership in organizations", 2006, Pearson.
6. A J. DuBrin, " Leadership", 2005, Wiley.
7. Mark Hughes, " Change management in organization ", 2008, Jaico.
8. Kavitha Singh, " Organization Change & Development ", 2005, Excel Books.
9. Lussir, " Effective Leadership", 2009, Cengage.
10. Eric Flamholtz & Yvonne Randle, "Leading Strategic Change" 1st Ed. 2009, Cambridge.
11. Ian Palmer, " Managing organizational change", 2008, TMH.
12. Jim Griesmer, "Organizational change", 2010, Oxford.
13. Jeffrey Russell, "Change Basics ", 2006, ASTD Press.
14. N. Sengupta, "Managing change in organizations", 2006, PHI.
15. Srivastava, "Transformation Leadership", 2008, Macmillan

Course-Code	Course Title				Core/Elective	
P23MB407	DATA VISUALIZATION (SYSTEMS)				Elective-I11	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. To enable students to understand the concepts related to data visualization.
2. To understand the tools and techniques of Data Visualization, dashboards.
3. To enable a practical understanding of Visualization with Power BI.

**Course Outcomes:**

1. Enables students to understand importance of Data -Visualization for Decision- making.
2. Helps students to get practical experience of Data Visualization on Microsoft Power BI.

**Unit - I: Introduction to data and information visualization:**

Definition and why we visualize data, How we visualize data, A brief history of Data Visualization, Types of data - categorical, ordinal and quantitative data. Visual analytics concepts.

**Unit - II: Data Visualization tools and techniques:**

Data Visualization tools , Multidimensional Data Visualization tools, Column and Bar graphs, Charts, Line graphs, Scatter plots, Pie graph, Hierarchical and Landscape Data Visualization tools, Maps, Tree graph.

**Unit - III: Data Visualization -Dashboard Basics:**

Definition- Performance of dashboard, Types of dashboards- Operational, Tactical and Strategic. Dashboard design, Business activity monitoring through Dashboards, Common pitfalls of dashboard design. Organizing data for dashboards

**Unit - IV: Introduction to Power BI:**

Power BI, Concepts-Parts of Power BI Desktop , Major Building Blocks of Power BI, Data Sets, Shared data sets, Reports, Dashboards - Types of Visualizations, Area charts, Bar and Column charts, Donut charts, Gauge charts, KPI's, Line charts, Maps, Matrix, Q&A Visual, Tree maps, Waterfall charts.

**Unit - V: Microsoft Power BI and Other features:**

Getting Data Source-Excel as a source, SQL as source, Web as a source, Creating and interacting with Dashboards, Sharing dashboards -Power Query editor for querying data and Report server for reports.

**Suggested Readings:**

1. Dick Kusleika “Data Visualization with Excel dashboards and reports”, 2021, Wiley.
2. Ramesh Sharada, Dursun Delen, Efraim Turban,”Business Intelligence”, A managerial perspective on analytics Pearson.
3. Stephanie P.H,”Effective Data Visualization: Right chart for sight data” Evergreen 2019.
4. Tom Soukup, Ian Davidson,”Visual Data Mining -Techniques and tools for Data Visualization and Mining”, Wiley Publishing.
5. Wayne W Eckerson, ”Performance Dashboards-Measuring, monitoring and managing your business” Wiley & Sons, Inc.
6. Mitchell Pearson, Manuel Quintana,”Microsoft Power BI quick start guide: Packt Publishing, 2018.
7. Alberto Ferrari, Marco Russo,”Introducing Microsoft Power BI- Microsoft Press, 2016, Microsoft Corporation.



Course-Code	Course Title			Core/Elective		
P23MB408	PYTHON PROGRAMMING (BUSINESS ANALYTICS)			Elective-III		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:** This course will enable students to

1. Learn Syntax and Semantics and create Functions in Python.
2. Handle Strings and Files in Python.
3. Understand Lists, Dictionaries and Regular expressions in Python.
4. Implement Object Oriented Programming concepts in Python.
5. Build Web Services and introduction to Network and Database Programming in Python.

**Course Outcomes:** The students should be able to:

1. Examine Python syntax and semantics and be fluent in the use of Python flow control and functions.
2. Demonstrate proficiency in handling Strings and File Systems.
3. Create, run and manipulate Python Programs using core data structures like Lists, Dictionaries and use Regular Expressions.
4. Interpret the concepts of Object-Oriented Programming as used in Python.
5. Implement exemplary applications related to Network Programming, Web Services and Databases in Python.

### UNIT - I

Python Basics, Objects- Python Objects, Standard Types, Other Built-in Types, Internal Types, Standard Type Operators, Standard Type Built-in Functions, Categorizing the Standard Types, Unsupported Types

Numbers - Introduction to Numbers, Integers, Floating Point Real Numbers, Complex Numbers, Operators, Built-in Functions, Related Modules

Sequences - Strings, Lists, and Tuples, Mapping and Set Types

### UNIT - II

FILES: File Objects, File Built-in Function [ open() ], File Built-in Methods, File Built-in Attributes, Standard Files, Command-line Arguments, File System, File Execution, Persistent Storage Modules, Related Modules

Exceptions: Exceptions in Python, Detecting and Handling Exceptions, Context Management,

\*Exceptions as Strings, Raising Exceptions, Assertions, Standard Exceptions,

\*Creating Exceptions, Why Exceptions (Now)?, Why Exceptions at All?, Exceptions and the sys Module, Related Modules  
Modules: Modules and Files, Namespaces, Importing Modules, Importing Module Attributes, Module Built-in Functions, Packages, Other Features of Modules

### **UNIT - III**

Regular Expressions: Introduction, Special Symbols and Characters, Res and Python  
Multithreaded Programming: Introduction, Threads and Processes, Python, Threads, and  
the GlobalInterpreter Lock, Thread Module, Threading Module, Related Modules

### **UNIT - IV**

GUI Programming: Introduction, Tkinter and Python Programming, Brief Tour of Other  
GUIs, RelatedModules and Other GUIs

WEB Programming: Introduction, Web Surfing with Python, Creating Simple Web  
Clients, AdvancedWeb Clients, CGI-Helping Servers Process Client Data, Building CGI  
Application

Advanced CGI, Web (HTTP) Servers

### **UNIT - V**

Database Programming:

Introduction, Python Database Application Programmer's Interface (DB-API), Object  
RelationalManagers (ORMs), Related Modules

### **TEXT BOOK:**

1. Core Python Programming, Wesley J. Chun, Second Edition, Pearson.

Course-Code	Course Title			Core/Elective		
P23MB409	TECHNOLOGY FOR ENTREPRENEURS (ENTERPRENEURSHIP)			Elective-I11		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course objectives:**

1. This course explores the intersection of technology and entrepreneurship
2. It focuses on how technology both drives and enables entrepreneurial ventures.
3. Students will learn about key technologies that have revolutionized various industries
4. They will learn about the essential technological skills required for successful entrepreneurship.

**Course outcomes:**

1. Understand the role of technology in shaping entrepreneurial opportunities.
2. Identify and evaluate emerging technologies with the potential for entrepreneurship
3. Develop the necessary technological skills to create and manage entrepreneurial Startups.
4. Analyze Real-world Case Studies of Successful and Failed entrepreneurial ventures.
5. Formulate effective strategies for integrating technology into entrepreneurship

**Unit I: Introduction to technology & entrepreneurship:**

Technological entrepreneurship: Concept, meaning and definition; Historical overview of technological advancements and entrepreneurship; Importance of technology in identifying market gaps and creating value; Overview of key concepts such as innovation, disruption, and scalability.

**Unit II: Technologies driving entrepreneurial opportunities:**

Understanding emerging technologies (e.g., AI, IoT, Blockchain, Biotech), Disruptive potential of new technologies in various industries, Case studies of successful startups, Leveraging technology for entrepreneurship, Identifying market trends and opportunities through technological advancements

**Unit III: Technological skills for entrepreneurs:**

Basics of coding and programming for non-technical entrepreneurs, Data analysis and interpretation for informed decision-making, UI/UX design principles for creating user-friendly products and introduction to cyber security and data privacy considerations.

**Unit IV: Integrating technology into models**

Lean startup methodology and iterative development, Design thinking and user-centered product development, Building Minimum Viable Products (MVPs) to validate ideas, Strategies for scaling technology-driven ventures.

**Unit V: Challenges and strategies in technological entrepreneurship:**

Managing technology risks and uncertainties, Intellectual Property protection and patents, Navigating regulatory and ethical challenges in tech startups, learning from failure: Case studies of unsuccessful technology venture

**Suggested Readings:**

1. Ries Eric (2011) The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses, Portfolio Penguin Publisher
2. Duening, T. N., Hisrich, R. A., & Lechter, M. A. (2016). Technological Entrepreneurship: Creating, Capturing, and Protecting Value (1st ed.). Academic Press.
3. Peter Thiel and Blake Masters (2014).Zero to One: Notes on Startups, or How to Build the Future ,Virgin Books Publisher - 2014th edition
4. Timmons, J. A., Spinelli, S., &Zacharakis, A. (2019).New Venture Creation: Entrepreneurship for the 21st Century, McGraw-Hill Education.
5. Morris, M. H., Kuratko, D. F., & Covin, J. G. (2019).Corporate Entrepreneurship & Innovation, Cengage Learning.
6. Christensen, C. M. (1997). The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail (1st ed.). Harvard Business Review Press.
7. Moore, G. A. (1991). Crossing the Chasm: Marketing and Selling High-Tech Products to Mainstream Customers (1st ed.). HarperBusiness.
8. Skarzynski, P., & Crosswhite, D. (2014). The Innovator's Field Guide: Market Tested Methods and Frameworks to Help You Meet Your Innovation Challenges. Wiley.
9. Ross, A. (2017). The Industries of the Future (Reprint ed.). Simon & Schuster.
10. Matthes, E. (2019). Python Crash Course: A Hands-On, Project-Based Introduction to Programming (2nd ed.). No Starch Press.
11. Kawasaki, G. (2015). The Art of Start 2.0: The Time-Tested, Battle-Hardened Guide for Anyone Starting Anything. Portfolio.
12. Eyal, N. (2014). Hooked: How to Build Habit-Forming Products. Portfolio.
13. Blank, S., &Dorf, B. (2012). The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company (1st ed.). Wiley.
14. Croll, A., &Yoskovitz, B. (2013). Lean Analytics: Use Data to Build a Better Startup Faster. O'Reilly Media.
15. Horowitz, B. (2014). The Hard Thing About Hard Things: Building a Business When There Are No Easy Answers. Harper Business.
16. Aulet, B. (2013). Disciplined Entrepreneurship: 24 Steps to a Successful Startup. Wiley books

Course-Code	Course Title				Core/Elective	
P23MB410	INTERNATIONAL FINANCE (FINANCE)				Elective-IV	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. To provide an analysis of the evolution of International Financial System.
2. To learn about international banking.
3. To study about the foreign exchange markets.
4. To learn the financial management of MNCs.
5. To understand the international tax environment.

**Course Outcomes:**

After studying this course, the student will be able to

1. Differentiate between fixed and floating rates
2. Make calculations relating to foreign exchange rates based on parity theories
3. Understand the financial instruments in international markets
4. Make decisions relating to capital budgeting techniques in an international environment

**Unit-I: International Financial System**

Evolution of international financial system –gold standard, Breton woods standard, floating exchange rate, EMS, currency board, sterilized and unsterilized intervention: international financial markets.

Global financial institutions: IMF, Bank for International settlements: International banking – Euro bank, types of banking offices, correspondent bank, representative office, foreign branch, subsidiary bank, offshore bank. International financial instruments Euro CP, Eurobonds, Foreign bonds, global bonds, euro equity, ADR, GDRs.

**Unit-II: Foreign exchange market**

Distinctive features and types, Major participants, Participants in foreign exchange market, structure of foreign exchange market in India, Exchange rate mechanism-quotes in spot market and forward market, Triangular arbitrage: nominal effective exchange rate (NEER), Real effective exchange rate (REER), currency derivatives- forwards, Futures, forward rate agreement, options, swaps. Foreign Exchange Management Act, BoP, BoP trends in India, current account convertibility, capital account convertibility, Tarapore Committee Report.

**Unit-III: Exchange Rate Determination & Risk Management**

Theories of exchange rate behavior, Parity conditions, Purchasing power parity, Interest rate parity. International Fisher effect, Unbiased forward rate theory, International debt crises and currency crises, Asian currency crisis, Greek debt crisis, Risk management in Multinational Corporations, Types of risk-currency risk, Transaction exposure, Translation exposure, economic exposure and assessment, interest rate risk, Country risk assessment, political risk. Financial risk, Risk management through hedging, Natural hedges, hedges with currency

derivatives, Forward market hedging options, Market hedge, Money market hedge, Hedging exposure through swaps, other financial and non-financial methods of hedging.

#### **Unit-IV: Multinational Corporate decisions in global markets**

Nature of International finance functions and the scope of International financial management, TFM and domestic FM, Foreign investment decision, Foreign direct investment(FDI) motives, FDI theories, Theory of comparative advantage, OLI paradigm of FDI in India, Modes of foreign investment, Evaluation of overseas investment proposal using NPV and APV, International cash management, Multinational capital structure decision, Cost of capital, International portfolio diversification rationale, barriers, home country bias

#### **Unit-V: International tax environment**

Types of taxation, Income tax, withholding tax, value added tax, Tobin tax, tax environment worldwide approach, territorial approach, Foreign tax credits, tax havens, Organization structure for reducing tax liabilities- Branch and subsidiary income, Payments to and from foreign affiliates, Controlled foreign corporation, netting, offshore financial centers, re-invoicing center, Tax havens; Objectives of taxation -tax neutrality tax equity, Double taxation avoidance, Tax implications of foreign enterprises in India, Taxation of foreign source income in India, Transfer pricing (TP) and tax planning -TP methods, TP rules in India

#### **Suggested Readings:**

1. Eun C.S., Resnick B.G., "International Financial Management", Tata McGraw Hill Education Pvt. Ltd., Special Indian Edition,
2. Levi M., "International Finance", Routledge, Taylor & Francis Group
3. Shailaja G, "International Finance", Orient Blackswan
4. Hendrik VandenBerg, "International Finance and Open Economy Macroeconomics" Cambridge
5. Sharan V., "International Financial Management", PHI,
6. Madura J., "International Financial Management", Cengage Learning.
7. Apte P.G., "International Finance", McGraw Hill
8. "Risk Management, Indian Institute of Banking & Finance, Macmillan.
9. Madhu Vij, "International Financial Management", Excel Books
10. Jain, Peyrard and Yadav "International Financial Management," Trinity Press.
11. Kevin. S., Fundamentals of International Financial Management, Second edition, PHI
12. Alan C. Shapiro, Peter Moles, "International Financial Management" Wiley

Course-Code	Course Title				Core/Elective	
P23MB411	SERVICES AND DIGITAL MARKETING (MARKETING)				Elective	
Prerequisites	Contact Hour per Week			CIE	SEE	Elective-IV
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. The main objective of this course is to supplement basic marketing and marketing strategy courses by focusing on problems and strategies specific to marketing of services on global markets
2. Identify the major elements needed to improve the marketing of services.
3. Develop an understanding of the roles of relationship marketing and customer service in adding value to the customer's perception of a service
4. Appraise the nature and development of a global marketing strategy.

**Course Outcomes:**

1. Students can examine the nature of services, and distinguish between products And services
2. Students can develop an understanding of the roles of relationship marketing and customer service in adding value to the customer's perception of a service.
3. Students can get appraised about the nature and development of a services marketing strategy.

**Unit-I: Introduction to services and Effective Management of Services marketing:**

Concepts, contribution and reasons for the growth of services sector, difference in goods and services in marketing, characteristics of services, Classification of services, Services marketing triangle, Internal marketing of services, External versus internal orientation of service strategy. Marketing demand and supply through capacity planning. Market segmentation, targeting and positioning in services.

**Unit-II: Understanding customer expectations through market research and consumer behavior in services:**

Conducting marketing research to understand customer expectations, Search experience and Credence property, consumer expectation of services, two levels of expectations, Zone of tolerance, Factors influencing customer expectation of services, Customer perception of services-Factors that influence customer perception of services, Service encounters, Customer satisfaction, Strategies for influencing customer perception.

**Unit-III: Marketing mix in services marketing:**

Traditional mix: The Seven Ps, Product decision, Pricing strategies and tactics, Promotion of service and placing of distribution methods for services. Extended marketing mix, The service delivery process, Designing of the service, blue printing, Managing service role in service encounters, service failure, Service recovery, importance of service employee, Quality- productivity trade off. Physical evidence in services, Types and role of service space

**Unit-IV: Introduction to digital marketing:**

Digital marketing, Importance of digital marketing, Difference between traditional marketing and digital marketing, Trends and scenario of the industry. Search Engine Optimization (SEO), History & growth of SEO, Campaign creation, Google Adwords, Ad creation, Approvals & extensions, Site targeting, Keyword targeting, Demographic targeting/ bidding.

**Unit - V: Social media marketing:**

Social media marketing & Social media, Blogging, Social networking, Video creation & Sharing, Use of different social media platforms, Content creation, Web analytics. Campaign tagging & Reporting, Email marketing, Introduction to audience reports, Traffic & content reports, Real-time data.

**Suggested Readings:**

1. Valarie A. Zeithaml, Mary Jo Bitner, Dwanye D. Gremler, Ajay Pandit, "Services Marketing - Integrating Customer Focus Across the Firm", Tata McGraw Hill Publishing Co.
2. Vasanti Venugopal and Raghu "Services Marketing", Himalaya Publishing House.
3. Douglas Hoffman, John E.G. Bateson, "Services Marketing: Concepts, Strategies and Cases", Cenage Publications- 5th Edition
4. Sucharith Debnath, Dr. Indrajit Sinha "Services Marketing, Nitya Publication.
5. Wirtz Jochen, Lovelock Christopher" Services Marketing: People Technology, Strategy Pearson, 8th edition.
6. Ian Dodson, "The Art of Digital Marketing: The Definitive Guide to Creating Strategic, Targeted, and Measurable Online Campaigns" Wiley, 1st edition, 2016



Course-Code	Course Title				Core/Elective	
P23MB412	PERFORMANCE MANAGEMENT (HUMAN RESOURCE)				Elective-IV	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. The main objective of the course is to offer an understanding of various approaches to measure performance and facilitate studying different methods of performance appraisal.
2. The course also provides knowledge of the processes performance bench - marking and framework of competencies
3. The course gives understanding of various performance metrics and models.

**Course Outcomes:**

1. To produce Competent Executives
2. To transform Performance Appraisals, Performance Management
3. To build pivotal performance
4. To establish leading Human Capital

**Unit - I: Introduction:**

Definition, concerns and scope of PM. Performance appraisals, Determinants of job performance. Mapping, process, sequence and cycle of PM. Performance planning and Role clarity. KPAS- Performance targets, Trait, Behavior and results approaches to measuring performance. The impact of HRM practices on performance.

**Unit - II: Performance appraisal:**

Assessment center- psychometric tests. Role play-self appraisal, 360 degree appraisals- Rating-less appraisals for the future of PMS, Critical incidents worksheet, Combining behavior and outcomes, Attribution theory-Causal matrix, Diagnosis and performance improvement, Performance review, Performance analysis.

**Unit - III: Performance bench marking:**

Human information processing and performance loop, performance shaping factors- Yerkes- Dodson's Law, Corporate performance management, EFQM excellence model, Diagnostic and process bench marking, PM Audit, PM pathway analysis. The impact of Performance management on line managers and employees.

**Unit - IV: Competency mapping and pay plans:**

Competency mapping-Mercer's human capital wheel, Human asset worth estimator and accession rate, CIPD human capital framework, Performance, competence and contribution related pay models. Cafeteria benefits plan, call back pay. The McBer generic managerial competency model- Competency causal flow model, Competency gap, Competency Assessment-Balanced score card framework.

**Unit - V: Performance metrics and models:**

Performance measures pyramid. Steps for designing metrics, Wang Lab, smart pyramid, Conceptual, DHL, RCN Models of PM, Gilbert's performance matrix and Behavior Engineering model. Direction of trouble shooting with behavior model, Mager and Pipes trouble shooting model - ATI performance improvement model, Spangenberg's integrated model of PM, Sears model for organizational performance.

**Suggested Readings:**

1. Michael Armstrong, "Performance Management", 2010, Kogan Page.
2. Robert L Cardy, "Performance Management", 2008, PHI.
3. A.S. Kohli & T. Deb, "Performance Management", 2009, Oxford.
4. H. Aguinis, "Performance Management", 2009, Pearson.
5. T.V. Rao, "Performance Management & Appraisal System", 2008, Sage.
6. A.M. Sarma, "Performance Management systems", 2010, HPH.
7. B.D. Singh, "Performance Management systems", 2010, Excel books.
8. S. N. Bagchi, "Performance Management", 2010, Cengage.
9. M Armstrong, "Performance Management & Development", 2010, Jaico.
10. Prem Chadha, "Performance Management", 2009, Macmillan.
11. Joe Willmore, "Performance Basics", 2004, ASTD Press.

Course-Code	Course Title			Core/Elective		
P23MB413	DATA MINING FOR BUSINESS (SYSTEMS)			Elective-IV		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. To familiarize students with concepts related to data mining.
2. To understand the various tasks in data mining
3. To give a holistic application of data mining

**Course Outcomes:**

1. Enables students to understand the role of data mining in business and decision-making process.
2. Give students a practical overview of data mining
3. Facilitate students with the latest concepts in data mining

**Unit - I: Introduction to data mining:**

Definition- Data mining and knowledge discovery- Motivating challenges in data mining - Origins of data mining - Data mining tasks.

**Unit - II: Data pre-processing:**

Data summarization- Data cleaning- Data integration and transformation- Data reduction- Data discretization and concept hierarchy generation- Feature extraction-feature transformation.

**Unit - III: Association, Classification and Clustering**

**Association:** Definition, Market-Basket Analysis, Naive Algorithm, Apriori Algorithm, Software for association rule mining.

**Classification and prediction:** Decision tree, Bayesian classification, Rule-based classification, Prediction -Linear regression.

**Clustering:** Basic issues in clustering, partitioning methods clustering analysis software.

**Unit - IV: Web Mining and Other Mining:**

Web mining- introduction- Web content mining, Web usage Mining, Web structure mining- Spatial data mining- Text mining, Multimedia mining.

**Unit - V: Data mining applications-**

Application strength of data mining- Data mining for banking and financial data analysis- Data mining in insurance-data mining in biological data analysis- Social media marketing- CRM- Tourism industry-agriculture sector

### **Suggested Readings:**

1. Introduction To Data Mining - Pang-Ning Tan, Michael Pang, Vipin Kumar - Education - 2018.
2. Data Mining Concepts and Techniques- J. Han, M. Kamber- Morgan Kaufmann.
3. Introduction to Data Mining- ChaitanyaP. Agrawal, Meena Agrawal. Pearson
4. Data Mining: Concepts, Models, Methods and Algorithms- M. Kantardzic- John Wiley & Sons Inc.
5. Data Mining: Introductory and Advanced Topics - M. Dunham- Pearson Education.
6. Data mining Techniques and application – An introduction, Hongbo Du, Cengage Learning
7. Data Mining: Techniques And Trends, N. P. Gopalan, B. Sivaselvan , Prentice-Hall of India Pvt.Ltd
8. Khushboo Saxena, Sandeep Saxena, Akash Saxena, "Data Mining and Warehousing ", BPB Publications
9. G. K. Gupta "Introduction To Data Mining With Case Studies", PHI Learning
10. Jain Pei, Jiawei Han, Micheline Kamber,"Data Mining: Concepts and Techniques" Elsevier Science

Course-Code	Course Title			Core/Elective		
<b>P23MB414</b>	<b>INTRODUCTION TO POWER BI (BUSINESS ANALYTICS)</b>			<b>Elective-IV</b>		
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. To understand need importance of Power BI in Business
2. To enable understanding of Power BI design and create reports
3. To understand Chart and Map report properties
4. To enable understanding Power Query Editor and M Language

**Course Outcomes:** After Completion of the Course, Students will be able to:

1. Understand need and importance of power BI in business
2. Create Power BI reports and Auto filters
3. Enable understanding report visualization and properties and extract outcomes from reports
4. Retrieve information from Charts and reports
5. Understand and interpret power Query editor and M Language

**UNIT I**

**Introduction To Power BI**

Introduction to Power BI – Need, Imprtnce, Power BI – Advantages and Scalable Options, History – Power View, Power Query, Power Pivot, Power BI Data Source Library and DW Files, Cloud Colloboration and Usage Scope, Business Analyst Tools, MS Cloud Tools, Power BI Installation and Cloud Account, Power BI Cloud and Power BI Service, Power BI Architecture and Data Access, OnPremise Data Acces and Microsoft On Drive, Power BI Desktop – Instalation, Usage, Sample Reports and Visualization Controls, Power BI Cloud Account Configuration, Understanding Desktop & Mobile Editions, Report Rendering Options and End User Access, Power View and Power Map. Power BI Licenses

**UNIT II**

**Creating POWER BI Reports, Auto Filters**

Report Design with Legacy & .DAT Files, Report Design with Databse Tables, Understanding Power BI Report Designer, Report Canvas, Report Pages: Creation, Renames, Report Visuals, Fields and UI Options, Experimenting Visual Interactions, Advantages, Reports with Multiple Pages and Advantages, Pages with Multiple Visualizations. Data Access, PUBLISH Options and Report Verification in Cloud, “GET DATA” Options and Report Fields, Filters, Report View Options: Full, Fit Page, Width Scale, Report Design using Databases & Queries, Query Settings and Data Preloads, Navigation Options and Report Refresh, Stacked bar chart, Stacked column chart, Clustered bar chart, Clustered column chart, Adding Report Titles. Report Format Options, Focus Mode, Explore and

Export Settings

### **UIT III**

#### **Report Visualization And Properties**

Power BI Design: Canvas, Visualizations and Fields, Import Data Options with Power BI Model, Advantages, Direct Query Options and Real-time (LIVE) Data Access, Visualization Filters, Page Filters, Report Filters, Conditional Filters and Clearing. Testing Sets, Creating Customised Tables with Power BI Editor, General Properties, Sizing, Dimensions, and Positions, Alternate Text and Tiles. Header (Column, Row) Properties, Grid Properties (Vertical, Horizontal) and Styles, Table Styles & Alternate Row Colors Background. Borders Properties, Column Headers, Column Formatting, Value Properties, Conditional Formatting Options – Color Scale, Page Level Filters and Report Level Filters

### **UNIT IV**

#### **Chart And Map Report Properties**

CHART Report Types and Properties, Stacked Bar Chart, Stacked Column Chart, Clustered Bar Chart, Clustered Column Chart, Line Charts, Area Charts, Stacked Area Charts, Line And Stacked Row Charts, Line And Stacked Column Charts, Waterfall Chart, Scatter Chart, Pie Chart, Field Properties: Axis, Legend, Value, Tooltip, Formats: Legend, Axis, Data Labels, Plot Area, Data Labels: Visibility, Color And Display Units, Data Labels: Precision, Position, Text Options, Analytics: Constant Line, Position, Labels, Working with Waterfall Charts and Default Values, Map Reports: Working with Map Reports, Hierarchies: Grouping Multiple Report Fields

### **UNIT V**

#### **Power Query & M Language**

Understanding Power Query Editor – Options, Power BI Interface and Query / Dataset Edits, Working with Empty Tables and Load / Edits, Empty Table Names and Header Row Promotions, Undo Headers Options. Blank Columns Detection, Data Imports and Query Marking in Query Editor, JSON Files & Binary Formats with Power Query, JavaScript Object Notation – Usage with M Lang., Applied Steps and Usage Options. Revert Options, creating Query Groups and Query References. Usage, Query Rename, Load Enable and Data Refresh Options, Combine Queries – Merge Join and Anti-Join Options, Combine Queries – Union and Union All as New Dataset, M Language : NestedJoin and JoinKind Functions

#### **Suggested books**

1. **Data Analytics: The Ultimate Beginner's Guide to Data Analytics**, Author: Edward Mize
2. **Data Analytics: Become A Master In Data Analytics**, Author: **Richard Dorsey**
3. **Business Intelligence for Dummies**, Author: Swain Scheps
4. **Predictive Analytics for Dummies**, Author: Dr. Anasse Bari, Mohamed Chaouchi and Tommy Jung
5. **Business Analytics**, Data Analysis and Decision Making, Author: S.Christian Albright and Wayne L. Winston.
5. **Data Strategy**, How to Profit from a World of Big Data Analytics and The Internet of Things, Author: Bernard Marr

Course-Code	Course Title				Core/Elective	
P23MB415	<b>SOCIAL ENTREPRENEURSHIP ( ENTREPRENEURSHIP)</b>				<b>Elective-IV</b>	
Prerequisites	Contact Hour per Week			CIE	SEE	Credit
	L	T	P			
	4	1	-	40	60	5

**Course Objectives:**

1. To explain the concept of social entrepreneurship
2. To help understand the modalities involved in social entrepreneurship
3. To give a holistic perspective of social entrepreneurship

**Course Outcomes:**

1. After studying this paper the students will gain insights into the nature of social entrepreneurship
2. Students will understand the role of innovation and social entrepreneurship
3. Students will know the need for social entrepreneurship in the societal context

**Unit I: Over view of social entrepreneurship:**

Introduction to social enterprise, Understanding social entrepreneurship, Individual as a social entrepreneur, Challenges and prospects of social entrepreneurship, Models of social enterprises, Support of corporate social responsibility activities for social entrepreneurship.

**Unit II: Types of Social Entrepreneurship:**

Factors impacting transformation into social entrepreneur, Characteristics of social entrepreneur, Difference between a business entrepreneur and social entrepreneur, Forms of social enterprises: Profit and non-profit proprietorships- partnership, Non-governmental organization, society, trust and company, Variables determining selection of forms of registration.

**Unit III: Social innovation:**

Understanding environment and idea generation for social enterprise, Social innovation and inclusion, Need identification of products /services of social enterprise, Appraising the idea formation through feasibility analysis, Achieving social objectives with commercial ventures. Innovation approaches, Disruptive innovations, Theory of social change, Innovations in public and non-profit organizations, Steps to design an innovative social enterprise, Creating a social business model.

**Unit IV: Social entrepreneurship opportunities:**

Opportunities for social entrepreneurs and initiatives: Methods of sensing opportunities and fields of opportunities. Assessing and prioritizing opportunities, Enterprise launching and its procedure, Start-ups, incubation, accessing venture capital, CSR funds, PPP. Successful social entrepreneurship initiatives

**Unit V: Strategic framework of social entrepreneurship:**

Managing growth and performance, Strategic framework analysis of social enterprise, Crafting alliances between nonprofit business & government organizations, Social enterprise

management and sustainability of social enterprise, Social audits, Skill development and enhancement, Market research for product/services of social enterprise. Socio-economic impact of social enterprise, Benefits and rewards of social enterprise, Impact of social entrepreneurship on community and stakeholders.

**Suggested Readings:**

1. Paramasivan. C “Social Entrepreneurship”, New Century Publications, 2020
2. David Bornstein , Susan Davis, “Social Entrepreneurship : what everyone needs to know” Oxford university press, 2019
3. Prahalad C.K, The fortune at the bottom of the pyramid, Eradicating poverty through profits, 2007,Pearson
4. Bronstein David, How to change the world: Social Entrepreneurs and the birth of new idea, 2004
5. Archana Singh, Meetal Reeji “Social entrepreneurship and sustainable development” Routledge 2020
  
6. Constant Beugre “Social Entrepreneurship” 2016edition, Taylor & Francis Ltd
7. S.B. Verma, Y.T Pawar, “ Rural Empowerment through SHGs, NGOs and PRIs, Deep and Deep Publications Pvt Ltd, 2004
8. Gupta C B, N.P Srinivasan, “Entrepreneurship Development in India” , 2009
  
9. Maurice Hansan,”Social Entrepreneurship” Excelic Press LLC, 2021
10. Carole Carlson , “Social Entrepreneurship and Innovation”, 1st Edition Sage Publishing, 2022