Semester-IV

MM 401: PRODUCT & BRAND MANAGEMENT

MODULE I: Product Management

- 1. Product Concepts: 6 categories of new products (new to the product line, product line world, new additions, improvement/revisions, repositioned products, lower priced products), Design and Concurrent Engineering, Relationship between Product Life Cycle and Innovation, Stage gate process: Stages and corresponding Strategies for NPD, Challenges of product development, Various approaches to NPD (process driven, voice of the customer, statistics-driven), NPD productivity - sales from new products/R&D spending, Main causes of product failure [8L]
- Product Strategies and Analytics. Application of analytics in identifying product-opportunity gap, product management for competitive advantage, Understanding the role and responsibilities of the Product Development Management Association (PDMA), Product Evaluation, Product Line Management: Product Modification, Product Line Extension, Product Proliferation, Product Featuring, Product Pruning [7L]
- Design Thinking & Innovation: What is design thinking, Steps empathize, define, ideate, prototype, test, problem-solving – the design thinking way, form-function debate, hierarchical organization of products, design helps in moving up the value chain, FMEA, human-centered design, Product psychology [5L]

MODULE II: Brand Management

- 4. Brands in the marketplace, POP and POD, Product vs brand, brand management as an activity, Evolution of brand manager system in a dynamic market environment, Understanding primary brand associations (verbal, visual, emotional and sensory), brand iceberg, and practical guidelines for eliciting deeply held brand associations for Brand building [4L]
- Financial and Marketing Brand Equity: Concept of brand equity, Measuring brand equity, Different methods of its calculation, Trading and acquisition of brands, Customer-based brand equity (CBBE), Sources of brand equity [4L]

- 6. Brand Personality, Brand Identity: Concept, advantages, the importance of brand personality, Brand Personality Scales, 5 dimensions of JL Aaker's scale, Brand Identity, Understanding Kapferer's brand identity prism, Role of brand ambassadors [2L]
- Brand Communication: brand communication strategy, mapping brand strategy with IMC, Media strategy. Social Media, Digital Marketing and PR for branding, a basic study of semiotics – sign, signifier and signified (2L)
- 8. Brand Architecture and Extensions: Relationship between brands of the same company, House of Brands vs Branded house, endorsed brands and sub-brands, handling a brand portfolio, Line and Category Extensions, Advantages & disadvantages of brand extensions, Forward and Reciprocal spillover, Evaluating brand extension opportunities [2L]
- 9. Brand Positioning and Repositioning: Concept of perceptual maps, Positioning process and steps, Scope of brand repositioning exercise, From ad jingle to changing the business model, Relationship between Pricing and brand positioning Exploring the complex relationship, Cognitive and affective approaches, Challenges of maintaining a positioning-pricing relationship like value for money (VFM) or Luxury, Understanding cost behind the pricing, economic and social costs [6L]

Suggested Readings:

- 1. Lehmann, R. Donald & Winer, Russel S. (2004), Product Management, Pearson Education
- 2. Donald R. Lehmann and Russell S. Winer, Product Management, Fourth Edition, TMH
- 3. Keller, Kevin Lane (2007), Strategic Brand Management
- 4. Niraj Kumar & Paras Tripathi, Brand Management (text & cases), Himalaya Publishing House.
- M. G. Parameswaran, 2006, Building Brand Value: Five Steps of Building Powerful Brands, New Delhi: Tata McGraw Hill
- 6. H. V. Verma, 2004, Brand Management, New Delhi: Excel Books

MM 402: RETAIL MANAGEMENT

MODULE I:

1. Introduction to Retailing: Growth and importance, Strategic Retail Planning. Retail Organization, Models and Theory of Retail Development, Retail Formats, Rural Retailing, Environment and Legislation for Retailing [4L]

2. Retail Operations Management: Retail location research and techniques, Objectives of Store designing, Responsibilities of Store Manager, Store record and accounting system, Logistic and Information system, Relevant software for billing, inventory management [6L]

3. Retail Strategies - Pricing and Promotion: Retail Pricing Techniques (EDLP, High-Low Pricing, Psychological Pricing), Seasonal Pricing and Markdown Management, Loyalty Programs and Customer Incentives; Retail Sales Techniques and Promotion: Integrated Marketing Communication (IMC) in retail, Promotion Impact, Tactical analysis, Consumer and Retail Sales promotion techniques. [10 L]

MODULE II:

4. Customer Relationships and Behaviour in Retail: Understanding Consumer and Market Segment, Consumer Behaviour and Marketing Strategy, Consumer Perception, Self Concept, Relevance of Culture, Buying Decision, Opinion Leadership, Implications of Personal Influences [5L]

5. International Retailing: International Marketing Research and Information System, Market Analysis, Motives of International Retailing, International Retail Environment and Structure, Analysis of Retailing in Global Setting – methods and competition. [6L]

6. Supply Chain Management: Network, Challenges, Forecasting, Sourcing and Vendor Selection, Routing and Route sequencing, Inventory Management, Lead Time uncertainty and Product Availability, Cross Docking and Collaborative Planning. [4L]

7. E-Retailing: Use of IT in Retailing, Effective Management of Online catalogues, Direct Retailing Methods, Data warehousing, Analysis of E – Retailing Strategies, Digital and Network marketing. [5L]

Suggested Readings:

1. Bajaj, Tuli, & Srivastava ""Retail Management" Oxford University Press

2. Berman Barry & Evance J.R "Retail Management" Prentice Hall India

3. Jain J.N.& Singh P.P "Modern Retail Management – Principal And Techniques" Regal Publications

- 4. Swapna Pradhan "Retailing Management- Text And Cases" Tata Mcgraw-Hill
- 5. George H, Lucas Jr., Robert P. Bush, Larry G Greshan- Retailing
- 6. Barry Berman, Joel R Evans- Retail Management; A Strategic Approach

MM 403: SALES & DISTRIBUTION MANAGEMENT

MODULE I:

1. Introduction to Sales Management: Evolution of sales department; Nature & scope of personal selling & sales management; [2L]

2. **Personal Selling**: Types of selling situations (Sales Positions); Buyer-seller dyad; Theories of selling - AIDAS Theory, Right Set of Circumstances Theory, Buying Formula Theory, Behavioural Equation Theory; Personal selling process - prospecting (Steps & Sources) & qualifying, preapproach & approach, presentation (Types, components) & demonstration (Tools), overcoming objections, closing a sale (Methods), follow-up & maintenance (Steps, Objectives, Customer Service Methods) [4L]

3. **Planning and Organizing Sales Force Efforts**: Strategic planning and sales organization – Purposes; Basic types – Lines, Line and staff, Functional, Committee; Field Organization of the Sales Department; Sales department relations, Distribution network relations; Sales forecasting; Sales objectives; Qualitative and quantitative requirements of sales force planning [2L]

4. **Sales Force Management**: Sales Force Development: Hierarchy of sales force - roles and responsibilities, Hiring process; Sources of recruitment; Selection process; Methods of selection; Sales Training - Need and purpose, Types of training, Designing a training program - ACMEE model, Directing the Sales Force: Sales territories and quotas and budget, Controlling the Sales Force: Supervision; Determination of compensation of sales force; Leading and Motivating; Analysis of sales; Costs and Profitability; Appraisal of sales force performance [12 L]

MODULE II:

5. **Marketing Channel Management**: Marketing Channels: Functions and advantages; Channel flows; Channel levels; Types of channel intermediaries – Merchandisers, Agents, C&F agents, Facilitators; Channel Conflicts and remedies, Channel Design and Management: Analyzing consumer service needs, Setting channel objectives & constraints, Identifying major channel alternatives and Evaluating channel alternatives; Channel management and control – Selecting, Training, Motivating, Evaluating, Modifying [10L]

6. **Physical Distribution & Logistics**: Goals and function; Triangle of logistical decision - warehousing, inventory & transportation [4L]

7. **Retail and Merchandise Management**: Retail strategies; Location; Types of retail formats; Stores layout; Visual merchandising techniques;, Planning of assortment; Servicing and buying of merchandise; Supply chain management in retailing [6L]

Suggested Readings:

1. Cundiff, Still & Govoni : Sales Management – Decision, Strategies & Cases; PHI./Pearson Education

- 2. Levy, M. & Weitz, B.A.- Retailing Management McGrawHill
- 3. Panda, Sahadev: Sales & Distribution Management; OUP
- 4. Shapiro, R.L., Stanton, W.J. & Rich, G.A.: Management of Sales Force; TMH
- 5. S.L. Gupta Sales and Distribution Management, Excel Books India, 2009

6. Krishna K Havaldar Vasant M Cavale Sales and Distribution Management: Text and Cases, Tata McGraw-Hill Education,

MM 404: SERVICE MARKETING

MODULE I:

1. Service Concept: Definition, Characteristics of services, Tangibility continuum, Marketing mix for services, Different types of service sectors – traditional and new, Service experience – moments of truth, zone of tolerance. [6L]

2. Service Strategy Planning: Understanding the customer and competition, Positioning services, Service marketing triangle concept [2L]

3. Creating the Service Product: Creating service product, Customer value hierarchy, Flower of service, Service product mix, Branding service products, Service Marketing Pricing and Communications: Approaches to pricing of services, Elements of promotional mix for services [8L]

4. Designing and Managing Service Demand and Capacity: Designing service delivery system, Service blue printing, Customer as co-producer, Capacity constraints, Demand patterns, Strategies for matching capacity and demand, Wait lines and reservations [4L]

MODULE II:

5. Planning the Service Environment: Physical evidence, Servicescapes - types and role, customer response to environment, guidelines for servicescape strategies [3L]

6. Managing People: Critical importance of service employees, Problems and difficulties of boundary-spanning roles, Strategies for delivering service quality through people, Service leadership and culture [5L]

7. Service Quality: Service quality, Integrated Gap model - to identify and correct quality problems, Measuring and improving service quality [6L]

8. Different Services: Nature and characteristics of financial, hospitality, health-care, educational & professional, logistics, entertainment services and their respective marketing mix analysis [6L]

Suggested Readings:

Zeithaml,V.A., Bitner, M J, Grembler, D.D. &Pandit, A.: Service Marketing;, TMH
 Rao, K.R.M.: Services Marketing, Pearson Education
 Rajendra Nargundkar, Services Marketing: Text & Cases, Tata McGraw-Hill
 Publishing Company, New Delhi, 2008
 Apte, G.: Service Marketing; OUP
 MAKAUT/MBA/4th SEM
 (4 Credit: 40 hrs)
 Lovelock, C., Wirtz, J. & Chatterjee, J.: Services Marketing; Pearson Education
 Srinivasan R.: Services Marketing; PHI

OM 401: OPERATIONS RESEARCH APPLICATIONS

MODULE I:

1. Linear Programming: Revised simplex method, dual simplex method, introduction to Lingo software. [4L]

2. Integer Linear Programming: Gomory's cutting plane method, branch & bound method, vehicle routing problems [6L]

3. Goal Programming: Difference between linear programming & goal programming approach, model formulation – single goal with multiple sub goals and equally ranked multiple goals, graphical solution, modified and alternative simplex method [6L]

4. Dynamic Programming: Developing Optimal Decision Policy, Dynamic Programming under Certainty and Dynamic Programming Approach for solving Linear Programming Problem. [4L]

MODULE II:

5. Non-Linear Programming Models: The general non-linear programming model, graphical solution, quadratic programming – Kuhn Tucker conditions, Wolfe's modified simplex method, Beale's method, and applications of quadratic programming. [6L]

6. Staff transfers problem: Two-stage supply chain distribution problem. [2L]

7. Queuing Theory: Structure of a queuing system and performance measures,

probability distributions in queuing theory, solution of queuing models. [4L]

8. Markov chains and forecasting: Steady state equilibrium, study of switching behaviour of customers between brands, absorbing states and accounts receivable applications, application to the study of click stream data. [6L]

9. Basic concept of Data Envelopment Analysis (DEA) [2L]

Suggested Readings:

1. Sharma, J.K., Operations Research: Theory and Application, Macmillan.

2. Taha, Hamdy A., Operations Research: An Introduction, Pearson Education.

3. Kalavathy, S., Operations Research, Vikas Publishing.

4. Hillier, F.S., Lieberman, G.J., Nag, B., & Basu P., Introduction to Operations Research, McGraw Hill Education.

5. Rardin, Ronald L., Optimization in Operations Research, Pearson Education.

OM 402: SUPPLY-CHAIN ANALYTICS

MODULE I:

1. Introduction: Overview of supply chain, analytics and supply chain analytics, supply chain decisions, purchasing and e-commerce in supply chain, types of supply chain. [2L]

2. Supply chain metrics: Definition, key metrics – cash to cash cycle time, perfect order measurement, customer order cycle time, fill rate, supply chain cycle time, freight bill accuracy, freight cost per unit, inventory turnover, inventory days of supply, days sales outstanding, on time shipping rate, average payment period, gross margin return on investment. [2L]

3. Facilities location and layout – Facilities Location: Integrated models for facility location selection and capacity allocation: p-Median, location models, fixed charge location-allocation models, gravity models, locating plants and warehouses simultaneously, location and allocation in multiple stages. Facilities layout: Heuristic algorithm. [8L]

4. Production planning decisions: Aggregate planning in a supply chain – role of aggregate planning in a supply chain, aggregate planning strategies, role of IT in aggregate planning in a supply chain, aggregate planning in practice. Tools and methods for aggregate planning – graphical approach, tabular method, linear programming, transportation problem, dynamic programming. [8L]

MODULE II:

5. Production control decisions: Scheduling – shop loading and sequencing, branch and bound algorithm, heuristics, line balancing, JIT, TOC. [6L]

6. Resource planning and control: Deterministic inventory models – EOQ, EBQ, quantity discounts, and multiple items inventory models, buffer/safety stock model, intentional shortages. Probabilistic inventory models (lot sizing for time varying demand), periodic review model. [6L]

7. Quality planning and control models: Overview on application of SQC, SPC, TQM and TPM. [4L]

8. Designing automated dashboards with relevant KPIs for production planning and control, resource planning and control, material planning and control, capacity planning and control, quality planning and control and distribution system optimization. [4L]

Suggested Readings:

1. Chopra, S., Meindl, P., VirKalra, D., Supply Chain Management: Strategy, Planning and Operation, Pearson.

2. Srinivasan, G., Quantitative Models in Operations and Supply Chain Management, PHI.

3. Ravi Ravindran, A., Warshing Jr., D.P., Supply Chain Engineering, Models and Applications, CRC Press, Taylor and Francis Group.

4. Mathirajan, M., Rajendran, C., Sadagopan, S., Ravindran, A., & Balasubramanian, P. (Eds.), Analytics in Operations/Supply Chain Management, I.K International Publishing House Pvt. Ltd.

5. Krajewski, L.J., Malhotra, M.K., Ritzman, L. P., & Srivastava, S.K., Operations Management: Processes and Supply Chains, Pearson.

6. Palekar, A. & Shiralkar, S.W., Supply Chain Analytics with SAP NetWeaver Business Warehouse, Tata McGraw Hill.

OM 403: SALES AND OPERATIONS PLANNING

MODULE I:

1. Introduction: Definition of sales and operations planning, benefits and best practices, relationship

between sales and operations planning, role of top management in Operation planning . [2L] 2. Operations Planning: Need for operations planning and control, the Annual Operations Plan, steps, functions of operations planning and control, comparison of operations planning and control in manufacturing and service organizations [4L]

3. Demand Forecasting: Objectives of forecasting in operations, elements of a good forecast, determinants of demand forecast, steps in the forecasting process, forecasts based on timeseries data and associative forecasting techniques – moving average, weighted moving average, exponential smoothing, trend equation, monitoring forecast errors, qualitative forecasting techniques. [8L]

4. Strategic Capacity Planning: Defining and measuring capacity, determinants of effective capacity, capacity requirements planning, using forecasting information for capacity planning, challenges of planning service capacity, developing capacity strategies, constraint management and evaluating alternatives [4L]

MODULE II:

5. Aggregate planning: Concept of aggregation, strategies for meeting uneven demand, aggregate planning as an operational tool, factors affecting aggregate planning, objectives and importance of aggregate planning, techniques and strategies for aggregate planning, Challenges of aggregate planning ; aggregate planning in services. [8L]

6. Operations scheduling: Purpose of scheduling, Master Production Scheduling (MPS), Bill of Materials (BOM), Multi-level BOM, overview of Manufacturing Resource Planning (MRP), MRP inputs, programs and outputs, scheduling methods – forward scheduling, backward scheduling, scheduling activities: routing, loading, dispatching, scheduling by type of operations: job operations, repetitive operations, labour-intensive operations and service operations. [8L] 7. Enterprise Resource Planning (ERP): Introduction, evolution of ERP, need for ERP, ERP implementation methodology, benefits of an ERP system, factors affecting ERP; Role of ERP in operations planning and control, economic impact of the adoption of ERP Systems. [4L]

Suggested Readings:

1. Stahl, R.A. & Wallace, T.F., Sales and Operations Planning: The How-To Handbook, SPD. 2.Russell, R.S. & Taylor III, B.W., Operations Management along the Supply Chain, Wiley India Edition.

3. Panneerselvam, R., Production and Operations Management, Prentice Hall India.

4. Stevenson, W.J., Operations Management, McGraw Hill Education (Indian Edition) 5. Leon,

A., Enterprise Resource Planning, McGraw Hill Education.

OM 404: MANAGEMENT OF MANUFACTURING SYSTEM

MODULE I:

1. Manufacturing systems: Introduction, Components of Manufacturing Systems, Process mapping, Manufacturing process planning –definition, scope and elements, functions of manufacturing managers, manufacturing concept planning, requirements of good manufacturing and assembly lines, layout planning and analysis. [6L]

2. Classification of Manufacturing Systems - Manual & Automated Assembly Systems & Material Handling Systems : Single Station Manufacturing cell and analysis – Manual Assembly line – Line Balancing – Automated Assembly System – Material Handling Equipment – Storage Systems. [6L] 3. Group technology/cellular manufacturing : Definition, objectives, cell formation, methods and production flow analysis. Layout design for cellular manufacturing, operator allocation, sequencing and scheduling of cellular manufacturing systems, set-up time reduction to enhance cell performance and flexibility definition [4L]

4. Just In Time (JIT systems): Overview, principles and benefits, elements of JIT, design and improvement aspects of JIT, role of suppliers in JIT, Kanban systems – definition and principles, types of Kanban – single card and two card Kanban, push and pull concepts of Kanban [4L]

MODULE II:

5. Synchronous manufacturing: Definition, operation planning and control based on Theory of Constraints, measures of performance, constraints in manufacturing system, Drum-Buffer-Rope (DBR) methodology, Flexible Manufacturing Systems (FMS) – meaning, components and types, conceptual model of FMS, applications of FMS. [8L]

6. Lean and Agile manufacturing: Concept, advantages, Lean Manufacturing similarities and differences with lean manufacturing, lean-agile manufacturing systems. [4L]

7. Green manufacturing: Importance, methodology and applications. [2L]

8. Intelligent manufacturing systems: Industry 4.0: First to fourth industrial revolutions, objective of Industry 4.0; Overview of Digital Manufacturing, Additive manufacturing/3-D printing, Digital-Networked Manufacturing, New-Generation Intelligent Manufacturing [6L]

Suggested Readings: 1. Mahadevan, B., Operations Management – Theory and Practice, Pearson.

2. Chase, R.B., Shankar, R., & Jacobs, F.R., Operations and Supply Chain Management, McGraw Hill Education.

3. Ohno, T. & Mito, S., Just-in-Time for Today and Tomorrow, Productivity Press 4. Cheng, T.C.E., & Podolsky, S., Just-in-Time Manufacturing: An Introduction, Chapman & Hall 5. Irani, S.A. (Editor), Handbook of Cellular Manufacturing Systems, John Wiley & Sons M

SM 401- BUSINESS INTELLIGENCE AND BIG DATA

MODULE I

1. Business Intelligence – Introduction, Framework of Business Intelligence- Definition, History, Architecture of BI, benefits of BI, Intelligence creation and use of BI governance, Transaction processing versus analytic processing, BI implementation – Developing or acquiring BI, Justification and Cost-benefit analysis, Security and protection of privacy, Integration of systems and applications, BI tools and techniques, Major vendors.[10 L]

2. Data Warehousing – Definition, and concepts, Characteristics, Data marts, Operational data stores, Enterprise data warehouse, metadata, Architectures. Data warehouse process overview. Data integration, ELT and ETL (Extract-Transform-Load). Data warehouse development – Vendors, Development approaches, Representation of data in data warehouse, OLAP Vs OLTP, OLAP operations Implementation issues of data warehouse, Administration, security and future trends of data warehouse. (10L)

MODULE II

- Introduction to Business Analytics (BA)- BA: The science of data driven decision making, Types and Techniques of Analytics- Descriptive, Predictive and Prescriptive, Big Data Analytics, Web and Social Media Analytics, Machine Learning Algorithms, Analytics Capability or Framework Building, Roadmap and Challenges in Capability Building. Data Types and Scales: Structured, Unstructured, Cross-sectional, Time Series and Panel Data. Data Visualization techniques like Scatter Plot, Box Plot, Bubble Chart etc. Stochastic Models and Reinforcement Learning. [12 L]
- Hadoop: History of Hadoop- the Hadoop Distributed File System (HDFS) Components of Hadoop, Analysing the Data with Hadoop- Hadoop environment -Design of HDFS- - Hadoop File System Overview, Operations and Basic Commands-Developing a Map Reduce Application-How Map Reduce Works - Map Reduce Types and Formats- Map Reduce Features - Hadoop Streaming- Installing, Configuring Hadoop and Creating Hadoop account [8 L]

TEXTBOOK:

1. U Dinesh Kumar: Business Analytics- The Science of Data Driven marketing, WILEY, 2022

2. Turban, E., Sharda, R., Delen, D. and King, D., Business Intelligence- A Managerial Approach,

Pearson Education, New Delhi, 2012.

3. Tom White: Hadoop- The Definitive Guide, 4th Edition, O'Reilly

REFERENCE:

Sonar, R.M., Next generation Business Intelligence – A Knowledge Based Approach, VIKAS Publications, New Delhi, 2011.

SM 402: MANAGING DIGITAL & SOCIAL MEDIA PLATFORMS

MODULE I:

1. Business Models for Digital Platforms & New Forms of Value: Emergence of Digital platforms; Open Innovation & Crowd Sourcing Business Models, Social and Professional Networking Business Models, User-Generated Content & Long Tail Business Models & Revenue Generation [10L]

2. Network Effect: Direct and Indirect, the limitations of Modularity, Managing the Degree of openness [6L]

3. Collaborative Computing Technologies: Group Support system, Technologies [4L]

MODULE II:

4. Digital Platform Ecosystems & Digital Business Models: Ecological Approaches to Strategy & Digital Business Ecosystems, Value Capture in digital platform Ecosystem- Two-sided markets, The Internet of Things (IoT): Implications of Smart Connected Products, Scoping your Digital Ecosystem Niche. [8L]

5. Cyber Law: Cyber Crime and legal landscape around the world; IT Act,2000 and its amendments. Cyber Crime and punishments, Cyber Laws: Legal and Ethical aspects related to new technologies- AI/ML, IoT, Blockchain, Darknet. [4L]

6. Data Privacy and Data Security: Data privacy and data security, Personal Data Protection Bill and its compliance, Data protection principles, Big data security issues and challenges, Data protection regulations of other countries- General Data Protection Regulations (GDPR),2016; Personal Information Protection and Electronic Documents Act (PIPEDA), Social media- data privacy and security issues. [4L]

7. Social media and its impact: Social media practices: Blogging, Social bookmarking, Building communities-Pages & Channel, Hangouts. Impact of Social Media: Online activism, Citizen Journalism, Democratization/Digital Divide, Audience analysis & Content planning. Social Media Influencers - Who are they, How to find and use them to benefit your brand, Organizational policies on social media engagement for employees [4L]

Suggested Readings:

1. Michael A. Cusumano, Annabelle Gawer, David B. Yoffie, The Business of Platforms: Strategy in the Age of Digital Competition, Innovation, and Power, Harper Business

2. Swaminathan T. N., Karthik Kumar, Digital Marketing: From Fundamentals to Future, Andrew McAfee and Erik Brynjolfsson, Cengage Learning India

3. Dave Chaffey, Fiona Ellis-Chadwick, Digital Marketing, Pearson

4. Abhishek Das, Applications of Digital Marketing for Success in Business, BPB Publications

5. Chris Westfall, The New Elevator Pitch: The Definitive Guide to Persuasive Communication in the Digital Age, Marie Street Press

6. Feras Alhlou, Shiraz Asif, Eric Fettman Google Analytics Breakthrough: From Zero to Business Impact, Wiley

SM 403: STRATEGIC MANAGEMENT FOR IT

MODULE I:

1. Introduction to Information Technology: Fundamentals of Information Technology, Introduction to Computers & Bull [2L]

2. Data Storage and Database Management System: Overview of Database Management System, Concept of Relational Database Management Systems (RDBMS) [4L]

3. Network and Security: Overview of Network, The Internet Revolution, Internet and Internet technologies, Internet: World Wide Web (WWW), Advantages and Disadvantages, Internet Vs Intranet, The purpose and function of Internet Service Provider, Security and Internet Firewalls, [8L]

4. E-Commerce: E-Commerce Framework, Evolution of E-Commerce - Advantages and Disadvantages, Electronic Payment System, Electronic Cash - Smart Cards and Credits, E-Banking, Online Banking, E-Shopping, E-Marketing, M-Commerce [6L]

MODULE II:

 Introduction to Strategies: Conceptual Evolution of Strategy, Scope and Importance of Strategies, Purpose of Business, Difference between Goals and Objectives of Business, Strategic Intent through Vision and Mission Statements, Core Competencies of Business. Strategic Management: Need, Scope, Key features and importance, Role of Strategists in Decision Making, Strategists at various management levels, Types of Strategies, Limitations.
 [6L]

6. Strategy Formulation and Implementation: Process in Strategy Formulation, Strategy Implementation and its Stages, Reasons for Strategy Failure and Methods to overcome, Strategy Leadership and Strategy Implementation, Strategic Business Units (SBUs) [6L]

7. Business Policy and Decision Making: Overview and importance of Business Policies Procedures, Process and Programmes, Types of Policies, Corporate Culture, Factors Considered Before Framing Business Policies, Steps Involved in Framing Business Policies, Policy Cycle and its Stages, Role of Policies in Strategic Management [6L]

8. Strategic Management for IT: Application of Strategy Management in IT, Advantages and Disadvantages of IT in Strategy Management [2L]

Suggested Readings:

1. Olivier Furrer - Corporate Level Strategy: Theory and Applications– Routledge 2. CA Nikhil Singhal, Deepali Singhal – Information Technology and Strategic

Management For CA-IPCE – Mukhaksh Publications

3. Chandan Patni – Information Technology & Strategic Management for CA IPCC – Taxmann

4. Bhandari, Verma - Strategic Management: A Conceptual Framework – McGraw Hill Education

5. Anthony Henry; Understanding Strategic Management – Oxford University Press

6. Mellahi; Global Strategic Management– Oxford University Press

SM 404: E-COMMERCE AND DIGITAL MARKETS

MODULE I:

1. E-Commerce /E-Business: Introduction, Advantages and Disadvantages, Benefits, Features, Business models of E-Commerce, Model based on revenue models, Implementation of ECommerce business, Infrastructure Requirement for E-Commerce, Different types of Networking for E-Commerce ,Internet, Extranet and Intranet, Intelligent System, Risk of Ecommerce–Overview, Security for E-Commerce, Security Standards, Firewall, Cryptography [8L]

2. M-Commerce: Definition, Classification, Advantages and Disadvantages, Benefits, Pitfalls of M-Commerce, Hand Held Devices, Mobility and Commerce, Mobile Computing, Wireless Web, Payment Mode. [6L]

3. E-Strategy: Overview, Strategic Methods for developing E-Commerce, E-Advertisement, Payment Mode, E-Cheque, E-cash, E-Threats and Protection [6L]

MODULE II:

4. ERP and SCM: Definitions-ERP, CRM, SCM, Concept of ERP, Evolution of ERP, Scope and Problem of ERP selection and Implementation, Selection of EEP process, Features of Online Shopping Portals in India like Futurebazar.com and others, Concept of CRM: Features, Applications, SRM portal, Supply Chain Power (SCP) tools, Supply Chain Execution (SCE) Framework, Internet's Effect on Supply Chain Power, Case Study [8L]
5. E- Marketing/ Digital Marketing: E-shopping, Role, Policies, Online Marketing and Offline

marketing, SEO,SMM,SEM, Meta Tags, Content Marketing, Marketing in Digital Age, Telemarketing, Commercial packages for E-shopping Portal: case studies [7L]

6. EDI: Introduction, Definition, Features, Benefits, Application, Model, Protocol [5L]

Suggested Readings:

1. Drop shipping E-commerce Business Model 2019: Steven Sparrow

2. Electronic Commerce: Gray P. Schneider

3. E-Commerce Website Optimization: Dan Croxen-John, Johann van Tonder

4. Electronics Commerce – Technologies and Applications: Bhaskar Bharat, TMH

5. Frontiers of Electronic Commerce: Kalakota ,Whinston, Pearson Education

6. E-Commerce : Strategy Technologies and Applications: Whiteley, David, TMH

BA 401 BIG DATA TECHNOLOGY

MODULE I: 1. Overview of Big Data: History of big data, elements of big data, career-related knowledge in big data, advantages, disadvantages, structured and unstructured data. [6L] 2. Using Big Data in Businesses: Use of Big Data in Marketing, Finance, HR, Production and Supply Chain Management. [8L]

3. Technologies for Handling Big Data: Introduction to Hadoop, Spark, Kafka, Hive, Cassandra etc.; Cloud computing (features, advantages, applications), Application Data store (NOSQL, OLAP. [6L]

MODULE II:

4. Understanding Hadoop Ecosystem: Introduction to PIG, Execution Modes of Pig, Comparison of Pig with Databases, Grunt, Pig Latin, User Defined Functions, Data Processing operators. Hive: Hive Shell, Hive Services, Hive Meta store, Comparison with Traditional Databases, Hive QL, Tables, Querying Data and User

Defined Functions. Hbase: HBasics, Concepts, Clients, Example, Hbase versus RDBMS. Big SQL : Introduction [8L]

5. Hadoop Distributed File System: The Design of HDFS, HDFS Concepts, Command Line Interface, Hadoop file system interfaces, Data flow, Data Ingest with Flume and Scoop and Hadoop archives, Hadoop I/O: Compression, Serialization, Avro and File-Based Data structures. [6L]

6. NoSQL Data Management: NoSQL including document databases, Graph Database, Schema less database, CAP Theorem [6L]

Suggested Readings:

1. Zomaya and Sakr: Handbook of Big Data Technology

2. Sumit Gupta: Real time Big Data Analytics Book.

3. E. Siegel: Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die

4. A. Maheshwari: Data Analytics Made Accessible

5. J. W. Foreman: Data Smart: Using Data Science to Transform Information into Insight

6. V. Mayer-Schönberger and K. Cukier: Big Data: A Revolution That Will Transform How We Live, Work, and Think

BA 402 DATA MINING

MODULE I:

1. Introduction to Data Mining: data mining, Related technologies – Machine Learning, DBMS, OLAP, Statistics ,Data Mining Goals ,Stages of the Data Mining Process, Data Mining Techniques, Knowledge Representation Methods

Applications [4L]

2. Data Warehouse and OLAP: Data Warehouse and DBMS, Multidimensional data model, OLAP operations [2L]

3. Data Preprocessing: Data cleaning, Data transformation, Data reduction, Discretization and generating concept hierarchies, Installing Weka 3 Data Mining System [4L]

4. Data Mining Knowledge Representation: Task relevant data, Background knowledge, Interestingness measures, Representing input data and output knowledge, Visualization techniques, Experiments with Weka- visualization [6L]

5. Attribute-Oriented Analysis: Attribute generalization, Attribute relevance, Class comparison, Statistical measures [4L]

MODULE II:

6. Data Mining Algorithms I: Association rules, Motivation and terminology, Generating item sets and rules efficiently, Correlation analysis [4L]

7. Data Mining Algorithms II: Classification, Basic learning/mining tasks, Inferring rudimentary rules: 1R algorithm, Decision trees, Covering rules [6L]

8. Data Mining Algorithms III: Prediction, The prediction task, Statistical (Bayesian) classification, Bayesian networks, Instance-based methods (nearest neighbor), Linear models [4L]

9. Clustering: Basic issues in clustering, conceptual clustering system, Partitioning methods: kmeans, expectation maximization (EM), Hierarchical methods: distance-based agglomerative and divisible clustering, Conceptual clustering: Cobweb [6L]

Suggested Readings:

1. Cristianini N. and Shawe-Taylor J.: An Introduction to Support Vector Machines and Other Kernel-based Learning Methods, Cambridge University Press, 2000.

2. Hand D., Mannila H. and Smyth P.: Principles of Data Mining, MIT Press, 2001.

3. Langley P.: Elements of machine learning, Morgan Kaufmann Publishers, 1996.

4. Larose D.T.: Discovering knowledge in data: an introduction to data mining, Wiley-Interscience, 2005.

5. Larose and Larose: Data Mining and Predictive Analysis, Wiley

BA 403: DATA ANALYTICS USING PYTHON

MODULE I:

1. Python Basics: Python variables, expressions, statements Variables, Keywords, Operators & operands, Expressions, Statements, Order of operations, String operations, Comments, Keyboard input. [4L]

Conditions & Iterations: Conditions, Modulus operator, Boolean expression, Logical operators, if, if else, if-elif-else, Nested conditions, Iteration - while, for, break, continue, Nested loop. [4L]
 Functions: Type conversion function, Math functions, Composition of functions, defining own function, parameters, arguments, Importing functions. [4L]

4. Recursion: Python recursion, Examples of recursive functions, Recursion error, Advantages & disadvantages of recursion. Strings: Strings Accessing values in string, Updating strings, Slicing strings, String methods – upper(), find(), lower(), capitalize(), count(), join(), len(), isalnum(), isalpha(), isdigit(), islower(), isnumeric(), isspace(), isupper() max(), min(), replace(), split(). List: Introduction, Traversal, operations, Slice, Methods, Delete element, Difference between lists and strings, Example program, Dictionaries - idea of dictionaries Tuples: idea of lists & tuples, Brief idea of dictionaries & tuples [8L]

MODULE II:

5. Object-Oriented Programming with Python: Concepts, Creating class, Instance objects, Accessing attributes, built in class attributes, destroying objects, Inheritance, Overloading, Overriding, Data hiding [4L]

6. Python Exceptions: Exception handling, except clause, User Defined Exceptions Regular expression- Match function, Search function, Matching VS Searching, Modifiers, Patterns [4L] 7. File Operations in Python: create, open, read, write, append, close files; Stack and Queue, Stacks and Queues using lists [4L]

8. NumPy, SciPy, SymPy: basic concepts Pandas: Object creation, Viewing data, Selection, Missing data, Operations, Merge, Grouping, Reshaping, Time series, Categoricals, Plotting, Getting data in/out from CSV, Excel. [8L]

Suggested Readings:

1. Python Programming - By Anurag Gupta, G Biswas – Mcgraw Hill Education

2. Learn Python The Hard Way, Zed A. Shaw, ADDISON-WESLEY

3. Learning Python, Mark Lutz, O'REILY

4. Programming In Python, Dr. Pooja Sharma, BPB

5. Python Programming - Using Problem Solving Approach, Reema Thareja, OUP

6. Introduction to data science : practical approach with R and Python / by B. Uma Maheswari and R. Sujatha. - New Delhi: Wiley India

BA 404: APPLICATION OF ANALYTICS IN BUSINESS

MODULE I:

1. Introduction to Marketing Analytics: Need for Data Driven Marketing Approach, Marketing Engineering, Model Building in Marketing Engineering, Basic Principles of Marketing Analytics to Business Problems, Slicing and Dicing Marketing data with Pivot Tables, Excel Charts to summarize data [6L]

2. Pricing Analytics: Basic Concept of Pricing, Estimating Demand Curves and Optimize Price, Price Bundling, Non Linear Pricing and Price Skimming [6L]

3. Marketing Forecasting: Simple Regression and Correlation, Multiple Regression to forecast sales, Modeling trend and Seasonality, Ratio to Moving Average Method, Winter's Method[4L]

4. Strategic Marketing Analytics: The STP framework, Value generation through STP framework, Managing the segmentation process, Segmentation in Real world: Cluster Analysis, Hierarchical and Non-Hierarchical - K Means Clustering, Prediction of Customer's segment membership: Discriminant Analysis (DA), two Group DA [4L]

MODULE II:

5. Positioning Strategies: Concept of Product positioning, Conduct a Positioning Study, Perceptual Mapping using Principal Component Analysis (PCA), Multidimensional Scaling (MDS), Incorporating preferences into Perceptual Maps [6L]

6. Customer Lifetime Value (CLV): Concept of CLV, Comparison of CLV with related metrics, Analyzing CLV, Extensions of CLV Analysis, Drivers of CLV, Uses of CLV metrics [8L]

7. Product Designing: Concept of Product Designing, Conjoint Analysis as a decompositional preference model, Steps in Conjoint Analysis, Uses of Conjoint Analysis, Drivers of CLV, Uses of CLV metrics [6L]

Suggested Readings:

1. Marketing Analytics - Data-driven Techniques with Microsoft Excel by Wayne L. Winston, Wiley

2. Marketing and Sales Analytics: Proven Techniques and Powerful Applications from Industry Leaders by Cesar A. Brea, Pearson

 Marketing analytics: Seema Gupta and Avadhoot Jathar. - New Delhi: Wiley India, 2024R.
 Advanced Customer Analytics: Targeting, Valuing, Segmenting and Loyalty Techniques' Mike Grigsby

5. Digital Marketing Analytics: Making sense of Consumer Data in digital world, Chuck Hemann, Ken Burbary; Que Publishing

FM 401: DERIVATIVES AND RISK MANAGEMENT

MODULE I:

1. Forward Contract and Futures: Forward contracts, Limitations of forward markets, pay-offs, Forward Rate Agreement (FRA) and Forward Foreign Exchange Contract – Cost of Carry Model, Introduction to futures, Stock Futures, Index futures, Commodity Futures and Currency Futures – Distinction between futures and forwards contracts. [6L]

2. Concept of Margin – Types of Margin in Futures – ITM, ATM, OTM - Concept of Lot size - Open Interest- Hedging through Forward and Futures –Contango and Backwardation – Basis Risk [2L]

3. Credit Derivatives: Types of Credit Derivatives- Types of Swap-Credit Default Swaps -Collateralized Debt Obligations(CDO) – A case study on Sub-Prime Crisis 2008, credit risk mitigation, Weather and Energy Derivatives [2L]

4. Option and Strategies: Call and Put Option- American and European Option- Put Call Parity

Different Option Strategies - Bully, Bearish, Neutral Non-Directional Strategy, Option Strategy – Profit & Loss Chart [4L]

5. Option Valuation: Pricing and Valuation of Option Contract- Binomial Option Pricing Model -Black Scholes Model – their interpretations, Option Greeks - Theta, Vega, Gamma, Delta [6L]

MODULE II:

6. The Foreign Exchange Market: – Functions, Participants and Transactions – Exchange Rates and Quotations –Bid & Ask rate – Cross rate- Indian foreign Exchange Market, Foreign Currency Derivatives – Forward Foreign Exchange Contract, Futures, Forwards, Swaps – Currency Swap and Interest rate Swap, Quality Spread Differential-Concept of Netting [8L]

7. Foreign Exchange Exposure & Risk Management: Two dimensions of Foreign Exchange Risk-Transactions Exposure & Translation Exposure, Arbitrage opportunity through Money Market Operation [4L]

8. Parity Condition and International Sources of Finance: Purchasing Power Parity (PPP), The Fisher effect, The International Fisher Effect, Interest Rate Parity Theory, The relation between Future and Spot Rate, Long Term Capital Market – ADR, GDR, Foreign Bond, Foreign Bank, EURO market, World Bank, IMF, Short Term – Banker's Acceptance, Discounting, Factoring, Forfeiting, EXIM Bank of India [8 L]

Suggested readings:

1. Options, Futures and other Derivatives, John C. Hull, Pearson Education

- 2. Derivatives, Dubofsky and Miller, Oxford University Press
- 3. Financial Derivatives, Gupta, S.L., Prentice Hall.
- 4. Financial Derivatives and Risk Management, O.P. Agarwal, Himalaya Publishing
- 5. Derivatives & Risk Management, Rajiv Srivastava, Oxford Publication House
- 6. Financial Derivatives: Risk Management, Bhalla. V. K., S. Chand & Company
- 7. Apte, P.G.: International Financial Management, Tata McGraw Hill.
- 8. Eiteman, Stonehill & Pandey: Multinational Business Finance, Pearson Education
- 9. C. Jeevanandam, Foreign Exchange and Risk management; S. Chand

FM 402 : Financial Modelling and Corporate Valuation

Module I:

1. Introduction to corporate valuation: Concepts of Value, Market Value vs Book Value, Approaches to Valuation, challenges in Valuation methods [2L]

2. Valuation Models: Net Asset-Based Approach, Earnings Based Approach (Earnings-Capitalisation Method, P/E Ratio), Relative Valuation, DCF Approach of Two and Three Stage Model, Equity DCF Model: Dividend Discount Model, Free Cash Flow to Equity (FCFE) Model, Adjusted Present Value (APV) Model, Economic Value-Added Method [10L]

3. Financial Modelling using Spreadsheet tools: Sources of Financial Data; Capital Budgeting Models - PV, NPV, IRR; Financial Statement Models. Cash Flow and Free Cash Flow Computation, Cash Flow Estimation, Estimate Cost of Equity, Debt and Capital, Stock Valuation using discounting (a) Dividends (Dividend Discount Model - DDM) (b) Free Cash Flow to Firm (FCFF) and (c) Free Cash Flow to Equity (FCFE).[8L]

Module II:

4. Corporate Restructuring and Valuation: Corporate restructuring through Merger and Acquisitions, Financing of Mergers and Acquisitions, Determination of Exchange Ratio, Value creation through synergy. Valuation of Target Firm, Valuation of Private Companies, Start-ups [10L]

5. Valuation of Intellectual Capital- Component - Market to Book Ratio. Tobin's Q Ratio, Analytical Approaches: Balanced Score Card, Human Resource Accounting, and Valuation of Intangible assets (brand valuation) [5L]

6. Market Risk Modelling: Concept of Value at Risk (VaR); Utility in Risk Management; VaR and Diversification; VaR models for Single asset and Portfolio; choosing appropriate volatility and returns, Historical Simulation for single asset and portfolio, Monte Carlo Simulation based VaR model for single asset. [5L]

Suggested Readings:

1. Chandra, P., Corporate Valuation, McGraw Hill

- 2. Kishore, R. M., Corporate Valuation: Text and Cases, Taxmann Publications
- 3. Damodaran, A., Investment Valuation, Wiley
- 4. Damodaran, A., Damodaran on Valuation, Wiley
- 5. Sengupta, C., Financial Modelling Using EXCEL & VBA, Wiley
- 6. Benninga, S., Financial Modelling, MIT Press

FM 403: MANAGING BANKS & FINANCIAL INSTITUTIONS

MODULE I:

1. Organization and Functions of banking industry: types of banks, comparative features of different banks, banking business models, factors, necessitating banker's role in the economy, intermediation functions of bank, credit creation, Competition in banking industry: competition in commercial & investment banks, changes in bank's operation, managing competition among banks, Bank Merger: Merger objectives, Stewart's motivating forces, evaluating mergers. [10L]

2. Failures of banks & Need for regulation: risk associated in banking business, causes of bank failures, warning signals in predicting bank failures. Bank support mechanism, problems to bank, regulatory support, bank's supervision, financial crisis to bank. Regulatory cycle. [6L]

3. Basel Committee Norms: Capital adequacy, 3 pillars, Basel-I & II, measurement of market & operational risk. [4L]

MODULE II:

4. Business loan & Microcredit: loan proposals, classification of loans based on pricing, methods of sanctioning loans, loan portfolio of banks, fundamentals of microfinance, microfinance credit model, Microfinance Institutions (MFI). [4L]

5. Credit Rating and Risk Management: structure of credit risk management, evaluation of credit risk, internal rating system, credit risk distribution. Rating of banks: business risk of banks, ratio used in bank rating, application of bank grading.[4L]

6. Liquidity functions of banks: liquidity management & conflict, action plan, time bucket. (4L)

7. Interest rate & Risk Management: asset & liability management, GAP analysis, duration analysis. [3L]

8. Fintech in Banking: Introduction to FinTech; Digital Banking and Neobanks, Payments and Mobile Wallets- E-wallets, payment gateways, and peer-to-peer (P2P) payment systems, Mobile Wallets, Cryptocurrencies and Blockchain, Cross-Border Payments, Financial Regulation [5L]

Suggested Readings:

1. M.Y. Khan, Indian Financial System, Tata Mc Graw Hill, Delhi

2. Jeff Madura, Financial Markets And Institutions, CenGage Learning, Delhi

3. H.R. Machiraju, Indian Financial System, Vikas Publishing House, Delhi

4. Pathak, The Indian Financial System, Pearson Education India

5. Suresh Padmalata & Paul Justin, Management of Banking and Financial Services; Pearson

6. Joel Bessis, Risk Management in Banking; Wiley

7. Jaspal Singh, Financial Technology (FinTech) and Digital Banking in India , New Century Publications

8. Devie Mohan, The Financial Services Guide to Fintech, Kogan Page

FM 404 : Personal Financial Planning

MODULE I:

- 1. **Understanding Personal Finance :** Introduction, Overview of personal financial planning, the financial planning process, Setting financial goals, Importance of personal finance management, Role of a financial planner, Ethical Issues in Financial planning. 6L
- 2. **Regulatory Framework** : Govt Regulation CBDT, SEBI, IRDA 4L
- 3. **Risk Management and Insurance Planning:** Types of risks (health, life, property, etc.), Insurance products (health, life, auto, disability, etc.), Evaluating insurance needs, Creating an insurance plan, Importance of Insurance: life and non-life insurance schemes. 6L
- 4. Credit and Debt Management : Concept, Types of Loan, Basics of Credit card, Rule of Credit Credit Score, Crowd Financing 4L

MODULE II

- 5. **Retirement Planning :** Importance of retirement planning, Estimating retirement needs, asset allocation; diversification and different retirement schemes 6L
- 6. Investment Planning : Process and objectives of investment, Risk Return Analysis, Investing in Stocks and Bonds , Mutual Fund including SIP, Derivatives and Commodity market , Investing in Real Estate, Asset Allocation and diversification, Investment strategies and Portfolio construction and management, International investment avenues. Concept of behavioural Finance in Investment Planning, Utility Theory, Heuristics, and Cognitive biases, Group Behaviour 10L
- 7. **Tax Planning** : Indian Tax System, Heads of Income, Filling Return, Tax evasion and Tax avoidance 4L

Suggestive Readings:

- 1. Personal Financial Planning, Dr. Shalu Garg. Sultan Chand & Sons
- 2. Introduction to Personal Financial Planning, Michael F. Cramer. Pearson Education.
- 3. Personal Financial Planning, Billingsley, Gitman, and Joehnk, Cengage Learning.
- 4. Personal Financial Planning: Theory and Practice, Michael A. Dalton and James F. Dalton, Money Education
- 5. Behavioural Finance Chandra. Prasanna.Mcgraw Hill
- 6. Behavioural Finance M. M. Sulphey. PHI
- 7. Behavioural Finance, Shuchita Singh Vikas Publishing House
- 8. Behavioural Finance , William Forbes, Wiley

HEALTHCARE

HCM401 Financial Management in Healthcare Sector

MODULE I

1. Basics of Financial Management: Introduction to Financial Management - Goals of the firm - Financial Environments, Profit vs. Goal maximization, Role of a Financial Manager. [2L]

2. Cash flow & Fund Flow Statement: AS 3, Preparation of Cash flow statement and fund flow statement. [6L]

3. Fund Allocation and Department Wise Performance Report: Overhead Distribution, ROI, RI. [4L]

4. Financial Ratio analysis: Financial Ratios & their implications. [2L]

5. Elements of Cost & method of Costing: different elements of cost & methods of costing [6L]

MODULE II:

6. Methods of Costing in Health Services: Services and Operating costing [4L]

7. Hospital Rate setting: Marginal Costing, CVP analysis. [4L]

8. Cost Control & Cost Reduction: Identification of cost and profit center, ZBB, introduction to activity based costing, identification of variances. [4L]

9. Budgeting: meaning of budget and budgetary control, revenue and capital budgeting, cash budgeting. [4L]

10. Cost Containment: Concept & application [4L]

Suggested Readings:

1. Chandra, Prasanna - Financial Management - Theory & Practice, Tata McGraw Hill.

- 2. Srivastava, Misra: Financial Management, Oxford University Press
- 3. Vashisht & Saxena Management Accounting, Vikash Publication
- 4. R. M. Kishore- Management Accounting, Taxmann
- 5. Brigham Financial Mgmt., Thomson Learning

6. Financial Management – B. Banerjee, Tata McGraw Hill.

HCM 402 HR and Marketing in Hospitals and Health-Care Organizations

MODULE I:

- 1. Human Resource Management (HRM) in Healthcare: changing Indian hospitals, ,characteristics of HRM, fundamental principles of human resource management, functions of HRM, importance of human resource management, tips for HR managers in hospitals. [4L]
- 2. .Human Resources Planning for Healthcare: Features, Objectives, Process of Human Resource Planning, Levels of Human Resource Planning, Benefits of Human Resource Planning, Problems in Human Resource Planning in healthcare, Factors affecting Human Resource Planning, Organization Audit, Health and Safety, Induction, Career Planning, Succession Planning. [4L]
- Recruitment ,Selection and Retention for HRM in Healthcare: Process of Recruitment, Situational factors affecting recruitment, Sources of Recruitment, Advantages & Disadvantages, Merits & Demerits, Methods of recruitment, Philosophies of recruitment, Constraints of recruitment in Healthcare industry. Process of Selection, Essentials of Selection Procedure. Retention: Merits & Demerits, Functions & Challenges, Process of Retaining employees in Healthcare. [6L]
- 4. Training and Development in Healthcare: Need assessment, types,methods,importance,evaluation of training in healthcare.Competency Mapping in healthcare. (2 L)
- 5. Compensation Management & Employee Benefit Plans: objectives of Compensation, Wage & Salary determination process, Theory of Wages, Concept of Wages, Methods of Wage Payment, Types of Benefit plans, Objectives of fringe benefits, Advantage & disadvantage of fringe benefits, Functions & Importance of fringe benefits. [6L]
- 6. Performance Management in Healthcare: Introduction, Meaning and Definition, Features, Objectives, Benefits and Uses, Limitation, Process of Performance Appraisal, Essentials of an effective Appraisal system, Legal & Ethical issues. [4L]

<u>MODULE II</u>

- 7. Basics of Marketing: Concept and Importance of Marketing in Healthcare Organizations, Challenges in Practicing Marketing in Healthcare Industry. Need,want and demand. STP, STP analysis, Consumer Buying Behaviour : factors ,process. Consumer Analysis - Consumer Buying Process; Organization Buyer Process, Organisation Buying Behaviour. Consumer Adoption Process , 7 P s of service marketing, Service Marketing triangle, Service quality and SERVQUAL MODEL. [6L]
- 8. Product and Service Marketing: Concept of Product, New Product Development, Branding of Hospital Facility, Nature and Characteristics of Services, Marketing Approaches to New Services Development, Service Mix Decision [8L]
- 9. Strategic Planning and Pricing in Health Care Marketing: Pricing Objectives in Healthcare Organizations, Price determination factors influencing pricing policy, Methods of pricing; pricing policies and strategies [6L]

- 10. Promotion Decision: Sales Force in Healthcare Organizations, Advertising in Healthcare Industry, Sales Promotion Practices in Healthcare Organizations, Public relations and News Media Relations in Hospitals and Health Care Organizations [8L]
- 11. Channels of Healthcare Distribution: Major Distribution Decisions, Strengthening,Referral System, Need for marketing specialists in healthcare distribution, Types of marketing channels, Selection of channels, Non Profit Organizations and Marketing: Concept of Medical Tourism [6L]

Suggested Readings:

1. Kotler Phillip (2008), "Principle & Practices of Marketing", Prentice Hall of India, New Delhi, 14th ed.

2. Desai (2007), "Service Marketing", Deep & Deep Publication, New Delhi, 1st ed

3. Tabish A (2005), "Hospital Administration", Jaypee Brothers, New Delhi, 3rd ed

4. Charles D. Reese, Occupational Health and Safety Management: A Practical Approach, Third Edition, CRC Press.

5. B. B. Mahapatro , Human Resource Management , New Age Publications

6. K. Aswathappa Human Resource Management, Text & Cases, McGraw Hill Education

HCM403 Quality Assurance and Technology in Healthcare

MODULE I:

1. Introduction & Evolution of Quality Systems: Concepts & Perspectives, Types of Quality, Dimensions of Quality, Evolution of quality, Characteristics, Importance and Benefits of Quality, Variables and Attributes, Conforming and Non conforming units, Defect –Standards or specification, Quality of design, conformance, performance, Total Quality Control. [6L]

2. TQM & SIX-SIGMA: Principles of TQM, Implementing TQM, Concepts in Hospital Departments, Six Sigma–Features, Benefits and Goals of Six Sigma, Scope of Six Sigma in Hospital, Pareto Analysis, Root Cause Analysis, Quality Improvement Teams, KAIZEN, Juran's Trilogy [6L]

3. Process Approach to Quality Management in Hospitals: Process Management, Triple Role of Process Team, PDCA Cycle, Preparation of process flow diagrams for distinct processes in a hospital, Quality Aspects of processes in Hospitals, Diagnostic services, Nursing services, House Keeping, Blood Bank, Pharmacy, OPD, Surgery, ICU, Emergency and Trauma care, Canteen, Hospital Stores. [6L]

4. Quality Assurance Methods: Principles of Quality Assurance, Quality Policy, Quality Manual, Hospital Sop's, 5'S Techniques, Specification limits, Process Control limits, Process capability analysis tools, Product Testing, Prototype Testing, Failure Testing, Process Mapping, Process Mapping Tools, Quality Audit, Business Process Reengineering, Essence of Re-engineering. [6L]

5. Quality Certification Systems: International Standards ISO 9000–9004, Elements of **ISO 90001 : 2015 (environmental laws) ,** ISO 14001:2015, ISO45001:2018 (safe from risk),ISO22000:2018(Food Safety), ISO 14001, Environment Management Systems, ISO 14000 Family, Stages of Environmental Management Standards, Evaluation and Compliance. [6L]

MODULE II

6. Quality Accreditation in Hospitals: Process and procedure of Accreditation System, Joint Commission International (JCI) - Mission, Benefits, Value, JCI for primary care centers, JCI Accredited Hospitals in India, Basic Objectives of National Accreditation Board for Hospitals (NABH)–Standards of NABH, Documentation Procedure, Patient Rights and Education–Benefits of NABH to Hospital, Employees, Patients and TPA's, NABL [6L]

7. Technology intervention in healthcare: Importance, Areas, Scope. New technological, advancement in healthcare globally and in India. (2L)

8. ERP usage in Healthcare : Hospital Management Information System(HMIS), Digital platforms in healthcare: Areas, processes, importance and challenges. E – healthcare. Artificial Intelligence and Machine Learning in Healthcare: Usage in different departments. Enhancing Patient care through technology. Data Privacy, Network and security. Database management, E commerce in healthcare. (4L)

Suggested Readings:

1. Bester field H. Dale, Total Quality Management, Pearson New Delhi.

2. Sridhar Bhat, Total Quality Management, Himalaya House publications

3. Sundara Raju, S.M., Total Quality Management: A Primer, Tata McGraw Hill.

4. Srinivasan, N.S. and V. Narayana, Managing Quality - concepts and Tasks, New Age International

5. Kume, H., Management of Quality, Productivity Press.
MAKAUT/MBA/3rdSEM
(4 Credit: 40 hrs)
6. Dennis, Lock, Handbook of Quality Management

HCM404 Legal Aspects of Healthcare Administration

MODULE I:

1. Legal Aspects of Healthcare: Law and establishment of hospitals-private / public hospitals, Legal requirements under medical council Acts, Classification of Hospitals, General Law of Contract: Essentials of a Contract – Offer and acceptance – Capacity of Parties - Free Consent – Consideration and legality of object – Void argument and Contingent Contract [6L]

3. Establishment Act and Contracts: W.B Clinical Establishment Act 2000, Shops and Establishment Act, Essentials of contract Act, Contractual obligations in hospital services - requisites of a valid contract - hospital as ' bailer' - sale and purchase of" goods Duties towards patients - code of ethics - violation legal consequences. [6L]

4. Medical Ethics: basic issues, importance, process of developing and implementing ethics and values in an institution, Codes of conduct: Hippocrates oath and declaration of Geneva, MCI regulation – professional conduct, etiquette and ethics [4L]

5. Medical Laws: Legal aspects relating to organ transplantation, MTP Act, 1971, Basics of Drugs and Cosmetic Acts, ESI Act, PNDT Act, Human experimentation [4L]

MODULE II

6. Medical Liabilities: Legal liability of hospitals - criminal, civil and tortuous,

Liability for negligence, consumer protection law, Absolute liability and vicarious liability, legal remedies available to patients: remedies under contract law, tort, criminal law and consumer protection' Act, Medical Jurisprudence [8L]

7. Waste Management: Biomedical Waste Management and Handling Rule – 1998: Meaning – Classification of Bio-medical waste, Treatment and disposal, Colour Coding and type of Container, Disposal of Bio-medical wastes, Biomedical waste Management Rule - Annexure of Ministry of Environment and Forest Notification in regard to Bio-Medical Waste Management and Handling Rule 1998 (Schedule I-VI) [8L]

8. Legal &Ethical Issues for Healthcare HRM: Law & the Healthcare Workplace, HIPPA- Requirements & Laws, Types of Fraud in Healthcare, Employment discrimination: Definition & Laws, Patient Protection Measures- Patient's Bill of Right, Medical Negligence- Definition ,Example and Case Studies, Ethical Issues in HR: Definition and Importance, Ethical Standard and major values in Healthcare, Ethical and Legal Issues Healthcare Informatics. [4L]

Suggested Readings:

1. N. D. Kapoor.- Text Book Of Commercial Laws; Sultan Chand & Sons Pvt. Ltd.

2. S.K Joshi – Text Book Of Law & The Practice Of Medicine; Jaypee Publication

3. G. D. Kunders – Hospital Administration, TMGH

4. V. K. Mahajan – A Text book of Community Medicine, Jaypee Publication

5. Dr. K. Park – Preventive and Social Medicine; Banarsidas Bhanot Publishers: Jabalpur. 18th Ed.

6. R.K. Chaube – Consumer Protection and Medical Profession; Jaypee Publication

HR 401: EMPLOYEE RELATIONS AND LABOUR LAWS

MODULE I:

1. Employee Relations Management (ERM): Overview, Tools, Core Issues, ERM in various Sectors (IT, Manufacturing etc) ERM Strategy and Employment Policies, Various people management software, Involvement and Commitment as Competitive Advantages, The Psychological Contract: Interest and Expectations, HR Infrastructure, Employee Surveys. [3L]

2. Industrial Relations: Overview, importance, Approaches to IR, Parties to IR, System Model of IR, Industrial Employees of India, Problems of Industrial Workers (absenteeism, commitment, Work Ethics), Contemporary Issues in Employee Relations [3L]

3. Employee Discipline: Types, Misconduct, Disciplinary Action, Disciplinary Enquiry and Procedures, Grievance Handling and Redressal. [2L]

4. Individual Bargaining and Collective Bargaining; Productivity Bargaining; Multi-Union Bargaining, Bargaining Power, Bargaining Relationship and Bargaining Process- Principles, Procedures and Subject Matter. Employee involvement and processes. Experience, Experiments, and Results Industry cum Region Parity Factor in Wage Negotiations, Process of Wage Negotiations and Settlement, including Charter of Demands. Negotiation Case Studies; PESTLE (Political, Economic, Sociological, Technological and Environmental Legal) Method; Apex Government Bodies in States/ Centre on labor matters such as Ministry of Labour and Employment, Government of India, EPFO, ESIC, V.V.Giri National Labour Institute, NOIDA, (U.P) etc. Work and Functioning of Industrial Relations, Industry disputes settlement machinery; Understanding concepts like ZOPA/BATNA; Understanding the Role of the ER/IR Manager in building business-friendly and positive union leadership perspective. [8L]

5. Employee Welfare and Employee Participation: Concept, Purpose, ILO Conventions and its application in India. Meaning of Employee Participation and Empowerment, Advantages, Employee Participation in India- Workers Participation Managementv(WPM), Employee Participation Management (EPM), Quality Circles [4L]

MODULE II:

6. Laws relating to Establishment: Evolution of Labour Laws in India, Factories Act, 1948; Plantations Labour Act, 1951; Mines Act, 1952; Shops & Establishment Act. [6L]

7. Laws relating to Wages: Code on Wages, 2019, Payment of Wages Act, 1936; Minimum Wages Act, 1948; Payment of Bonus Act, 1965; Equal Remuneration Act, 1976. [4L]

8. Industrial Employment (Standing Orders) Act, 1946; Trade Unions Act, 1926; Industrial Relation Code 2020, The Industrial Disputes Act, 1947 (downsizing, retrenchment, lay-off, bench employees and termination, Industrial discipline, and domestic inquiry. Disputes related to Mergers and Acquisitions. [4L]

9. Laws relating to Social Security – Code on Social Security 2020, Occupational Safety, Health and Working Conditions Code 2020 - Workmen's Compensation Act, 1923; Employees' State Insurance Act, 1948; Employees' Provident Funds & Misc. Provisions Act, 1952; Maternity Benefit Act, 1961; Contract Labour (Regulations and Abolitions) Act, 1970; Payment of Gratuity Act, 1972, The. Protection of. Human Rights Act, 1993, POSH (Prevention, Prohibition and Redressal) Act, 2013 (6L)

Suggested Readings:

1. Agarwal, S.L. : Labour Relations in India, McMillan

2. Pathak, A : Legal Aspects of Business, Tata McGraw Hill [4L]

- 3. Samant, S.R. & Dongle, B.N. (eds). CLR's Yearly Labour Digest, Dwivedi
- 4. Srivastava, S.C. : Labour Law in Factories, Mines, Plantations etc., Prentice Hall
- 5. Labour Laws: Taxman Publications

6. Labour Laws in India : P.L. Malik

HR 402 - Managing Diversity, Equity, Inclusion (DEI) and Change

MODULE-1

- 1. Understanding Culture and Cultural Mindset in an Organization Culture (Hofstede's 6 cultural dimensions), Levels of culture, Cross Culture Management, Culture and Individual behavior, understanding culture and cultural differences around the globe, developing a Cultural Mindset, Components of Cultural Mindset in Organization, Concepts of Culture iceberg, Culture as a barrier to change, Kluckhohn and Strodtbeck Model. (6L)
- 2. Diversity, Equity, Inclusion, and Belonging Definitions and key concepts: Diversity, Equity, Inclusion, and Belonging. Historical context and contemporary perspectives on DEI. Diversity in today's workplace, Benefits and challenges of workplace Diversity, Gender diversity, Challenges, Generational Diversity, Languages, Identity and Community. Implementing DEI initiatives: Planning, execution, and sustainability (6L)
- 3. Social Identity and Inclusive Leadership Stereotyping, prejudice and workplace discrimination, Creating inclusive corporate cultures. Traits of inclusive leaders (3L)

4. Legal and Ethical Considerations - Overview of anti-discrimination laws and regulations. Ethical dilemmas in managing DEI. Data Privacy and Confidentiality, Global Perspectives on D&I, Equity Matters, Navigating Diversity and Inclusion in HR Strategies. - Emphasizing the importance of LGBTQ+ inclusion in workplace culture. Introduction to Gender studies (Feminism and Queer Theory). Designing Inclusive Training and Development Programs, (5L)

MODULE-2

- Organizational Change Management Strategies Models of organizational change, .Lewin's three step model,. Kotter's 8-Step Change Model, ADKAR Model, Bridges' Transition Model, The 4I Model (Inquire, Involve, Inspire, Initiate). Action research model (6L)
- 6. Organizational Development intervention to manage change: Diagnostic, Action Components, Action research. Nature and Families of OD interventions (4L)
- 7. Team, Interpersonal and Comprehensive intervention- team building interventions, Diagnostic meeting, Role analysis techniques, Role negotiation techniques, Gestalt orientation to team building, Steps in intergroup interventions, Process Consultation, Third Party intervention, Survey Feedback, Four system management, Grid, Contingency approach, Structural Interventions : Job design, MBO, QWL, Socio -Technical Systems, Role of OD facilitator (10L)

HR 403 - STRATEGIC HRM

Module I:

- 1. Strategic Human Resource Management (SHRM): Meaning, Nature, Significance, and the conceptual framework; SHRM Approaches & Models: Universalistic, Contingency and Configurational Approaches, Models, Best Fit and Best Practice Approach, Resource- Based view of the firm. The "HR" Bundles approach, theoretical perspectives of SHRM, and Benefits of SHRM. Challenges of SHRM (6L)
- 2. The Strategic role of HR; Need to align HR with Corporate Strategy; HRM Strategy: Its Nature, Development of HR Strategy and implementation of HR Strategy; HRM strategies related to Organizational Capability and Organizational and Individual performance: Organization Development strategy, Human Capital Management Strategy, Knowledge Management strategy, Corporate Social Responsibility strategy, Organizational Performance strategy, Individual Performance Management strategy. (6L)
- 3. Contemporary Issues: Change, Restructuring and SHRM. Corporate Ethics, Values, and SHRM. Diversity & SHRM. Competencies of HR Professionals in a SHRM Scenario. Approaches for evaluating and measuring the impact of Strategic HRM (4 L)
- 4. Human Capital Management (HCM) Strategy: Concepts of Human capital, Objectives of HCM, Role of HCM Strategy, ROI of HCM, The link between HCM and Business Strategy, Developing an HCM Strategy. [4L]

MODULE II:

5. High Performance Work Systems: Meaning, definition of High Performance Work Systems, Characteristics of HPWS. Components of HPWS. Developing a high Performance Strategy, Developing high performance work systems. [4L]

6. Resourcing Strategy: Understanding Resourcing, The strategic HRM approach to resourcing, Integrating business and resourcing strategies, Bundling resourcing strategies and activities, The components of employee resourcing strategy: Workforce planning, Employee, Value proposition, Resourcing plans, Retention Strategy, Flexibility strategy. [4L]

7. Talent Management - Onboarding strategies, Strategic talent management, Components of a talent management strategy, Reward Strategy: Understanding Reward management, Reward strategy: definition, characteristics, basis, the content of reward strategy. Broad-brush reward strategy, Specific reward initiatives. Guiding principles, criteria for effectiveness of reward strategy and line management capability[8L]

8. HR Evaluation: Balanced Scorecard, HR score card, Malcom Baldrige business excellence model. [4L]

Suggested Readings: 1. Armstrong, Michael: Armstrong's Handbook of Strategic Human Resource Management, Kogan Page 2. L.Holbeche: Aligning Human Resources and Business Strategy,2002,Butterworth Heinemann 3. M.Porter: Competitive Advantage,1985,Free Press 4. G.Hamel & C.K.Prahalad: Competing for the Future,1994,HBR 5. Dessler,Gary : Human Resource Management, Pearson Education 6. Agarwala Tanuja: Strategic Human Resource Management, OUP 7. Aswathappa, K: Human Resource Management, Tata McGraw Hil

HR 404 Performance and Compensation Management

Module-I

- 1. Introduction, definition, and evolution of Performance Management: Key Result Areas (KRAs) setting, competency mapping, succession planning, mid-year review, Potential assessment etc, Role/job description, Goal setting, Performance agreement. Linkage of Performance Management to other HR Processes. [3L]
- Performance Appraisal- Reviewing& Managing Performance: Meaning, Objective, Appraisal Process, Issues in Appraisal Design. Appraisal Methods – Traditional methods, Modern Methods: Management By Objectives (MBO), Assessment Centres, 360 degree Feedback. Designing KRA based performance appraisal system, Problems of Rating, Appraisal Interview, Career Planning, Legal issues associated with Performance Appraisal, Performance Review Discussion [6L]
- 3. Performance Management, Competency Mapping and Strategic Planning: Linking Performance Management to the Strategic Plan, Competency Mapping, Balanced Scorecard, Building Support: Employee-Centric Communication, [5L]
- 4. Employee Development and Reward Management: Personal Development Plans (Skill Mapping, Hybrid Development Model), Direct Supervisor's Role (Facilitator Vs Micromanager), Performance Management Skills, Management of Rewards-Traditional and Contingent Pay (CP) Plans, Reasons for Introducing CP, Putting Pay in Context, Pay Structures Reward Management (Job Based, Skill based, Variable Based), Components of Reward Management (Financial and Non-Financial, Linkage of Performance Management to Reward (Goal Alignment), Ethics in Performance Management [6L]

Module -II

- 5. Compensation Minimum Wage, Fair Wage, Living Wage,
 - Wage Policy, Wage/Salary, Real Wage, Components of Wages: Basic, Dearness Allowances, House Rent Allowances, City Compensatory Allowance, Other Allowances, Wage Fixation, Pay for different types of employees, Managerial/ Executive Compensation-.Wage Administration - Pay Roll Management, Deductions etc Compensation System Design Issues – Compensation Philosophies – Compensation Approaches [4L]
- 6. Compensation Classification Types of Compensation, Incentives, Fringe Benefits. Strategic Compensation Planning, Methods of DA payment, Consumer Price Index, DA Neutralization . Productivity and Wages: Productivity Bargaining, Incentive Payments, Productivity Linked Bonus, Incentives –Individual & Group, The Wage Curve – Pay Grades – Salary Matrix, Compensation as a Retention Strategy (Fair Pay, Rewarding Performance [8L]
- 7. Theories of Wages Wage Structure Wage Fixation Wage Payment Salary

Administration - Executive Compensation – Incentive Plans – Team Compensation – Gain Sharing Incentive Plan – Enterprise Incentive Plan – Profit Sharing Plan- ESOPs – Compensation Management in Multi-National Corporations. [4L]

 Wage Boards - Pay Commissions - Employee Benefits – Benefits Need Analysis – Funding Benefits – Benchmarking Benefit Schemes - Employee Benefit Programmes – Security Benefits – Creating a Work Life Setting – Designing Benefit Packages. [4L]

Suggested Reading

Case Studies

- 1. T.V.Rao, Performance Management and Appraisal Systems, Response, 2008.
- 2. Richard.I. Henderson, COMPENSATION MANAGEMENT IN A KNOWLEDGE BASED WORLD, Prentice Hall India, New Delhi
- 3. Michael Armstrong & Helen Murlis, HAND BOOK OF REWARD MANAGEMENT, Crust Publishing House.