Avinashilingam Institute for Home Science and Higher Education for Women
Coimbatore-641043, Tamilnadu

MBA – IT (Two Years Program with Practicals)

Program Specific Outcomes (PSO)

MBA – IT

On successful completion of the MBA – IT programme, the graduates would be able to:
1. Demonstrate comprehensive knowledge of business functions, processes and policies related to IT management.
2. Source out and mine complex information and design business processes and customized business models through critical thinking and problem solving.
3. Demonstrate ethics and values in all areas such as IT governance and sustainable practices.
4. Apply IT and adopt global cross cultural practices to convert them into self sustaining businesses.
5. Emerge as socially responsible entrepreneur/intrapreneur with far-sightedness.

Scheme of Instruction and Examination (for students admitted from 2020-21 and onwards)

Part	Subject Code	Name of the Paper	T	P	Duration of exam	CIA	CE	Total	Credits
		Semester I							
I	20MBMC01	Management and Organisational Behaviour	4		3	40	60	100	3
I	20MBMC02	Accounting for IT Organisations	3	2	3	40	60	100	3
I	20MBMC03	Managerial Economics	4		3	40	60	100	3
I	20MBMC04	Marketing of IT Products and Services	4		3	40	60	100	3
I	20MBMC05	Quantitative Methods for Management	3	1	3	40	60	100	3
I	20MBMC06	System Analysis and Design	4		3	40	60	100	3
I	20MBMC07	Data – Strategic Organisational Resources (RDBMS)		4	3	40	60	100	2
I	20MBMC08	Business Communication		4	3	40	60	100	2
II		*CSS*		2					
		Semester II							
I	20MBMC09	Research Methods for Management	2	2	3	40	60	100	3
I	20MBMC10	IT Project and Operations Management	3	1	3	40	60	100	3
I	20MBMC11	Financial Management	3	1	3	40	60	100	3
I	20MBMC12	Human Resource Information System	3	1	3	40	60	100	3
I	20MBMC13	Business Process and Information Technology	3	1	3	40	60	100	3
I	20MBMC14	Enterprise Resource Planning		4	3	40	60	100	2
I	20MBMC15	Cyber Law (Open book)	4		3	100	-	100	4
I		*Inter Disciplinary Course*	4		3	40	60	100	4
I	20MBMC16	*Mini Project*		1		100	-	100	2
II		*CSS*		2					1
	Summer vacation-Internship Training for 30 days								
		Semester III							
I	20MBMC17	Strategic Management and Business Policy	4		3	40	60	100	3
I	20MBMC18	Entrepreneurial Development and Indian Ethics	3	1	3	100	-	100	3
I	20MBMC19	Applied Operations Research	3	1	3	40	60	100	3
I	20MBMC20M/F/H 20MBMC20O/R/E	Specialization I– Paper I	2	2	3	40	60	100	3
I	20MBMC21 S	Specialization II– Paper I	2	2	3	40	60	100	3
I	20MBMC22M/F/H 20MBMC22O/R/E	Specialization I – Paper II	2	2	3	40	60	100	3
I	20MBMC23S	Specialization II – Paper II	2	2	3	40	60	100	3
I	20MBMC24A/B/C/D	Sectoral Specialization	4		3	40	60	100	3
I	20MBMC25	Environmental Management (Self Study)	1		3	40	60	100	4
I		*Multidisciplinary Course*	2		3	100	-	100	2
II		*Professional Certification Course*							2

Part	Subject Code	Name of the Paper	Hrs. T	Hrs. P	Duration of exam	CIA	CE	Total	Credits
II	20MBMC26	*Internship Training*				100	-	100	2
		Semester IV							
I	20MBMC27	Business Intelligence and Analytics	3	1	3	40	60	100	3
I	20MBMC28M/F/H 20MBMC28O/R/E	Specialization I– Paper III	2	2	3	40	60	100	3
I	20MBMC29S	Specialization II – Paper III	2	2	3	40	60	100	3
I	20MBMC30M/F/H 20MBMC30O/R/E	Specialization I – Paper IV	2	2	3	40	60	100	3
I	20MBMC31S	Specialization II– Paper IV	2	2	3	40	60	100	3
I	20MBMC32	*Research Based Project*		15		100	100	200	6
		Total							**105**

Other course to be undergone by the student

- MOOC Course – 2 credits
- Minimum 105 credits to earn the degree

Specialisation - I

The students can choose any one of the specialization areas namely Marketing/ Finance/ Human Resource/ Operations / Retailing / Entrepreneurship as specializations:

Marketing

20MBMC20M	e- Customer Relationship Management
20MBMC22M	Supply Chain and Logistics Management
20MBMC28M	International Marketing
20MBMC30M	Digital Marketing

Finance

20MBMC20F	Investment and Security Analysis
20MBMC22F	Tax Planning and Management
20MBMC28F	International Financial Management
20MBMC30F	Strategic Cost Management

Human Resource

20MBMC20H	Organisational Dynamics and Development
20MBMC22H	Human Resource Development
20MBMC28H	Industrial and Labour Relations
20MBMC30H	Performance Management

Operations

20MBMC20O	Quality Management
20MBMC22O	Project Management
20MBMC28O	Lean and Agile Manufacturing Systems
20MBMC30O	Innovation and Technology Management

Retailing

20MBMC20R	Retail Brand Management
20MBMC22R	Retail Consumer Behaviour
20MBMC28R	E-Retailing
20MBMC30R	Supply Chain and Logistics in Retailing

Entrepreneurship

20MBMC20E	Family Business Management
20MBMC22E	Micro and Small Business Management
20MBMC28E	Social Entrepreneurship
20MBMC30E	Indian Ethos and Business Models

Specialisation – II - Systems (Mandatory)

20MBMC21S	Information Security and Audit Control
20MBMC23S	Internet Programming for e-Commerce
20MBMC29S	Computer Networks
20MBMC31S	Data Sciences with R Programming

Sectoral Specialisation

The student can choose one paper/subject as Sectoral Specialization from the choice given below:

20MBMC24A	Hotel Management
20MBMC24B	Hospital Management
20MBMC24C	Retail Management
20MBMC24D	Financial Services

Other Programmes offered by the Department

Interdisciplinary Courses:
a. Marketing
b. Creativity in Advertising
c. Enterprise Resource Planning
d. Retail Management

Multidisciplinary Courses:
a. Total Quality Management
b. Finance for Non-finance executives
c. Social Entrepreneurship

Management and Organisational Behaviour

Semester I   **Hrs.of Instruction/week : 4T**

20MBMC01   **No. of credits**   **: 3**

Objectives:

1. Elucidate application of Management theories to IT organisations.
2. Focus on the application of OB theories to IT organisations.
3. Enhance the knowledge on IT applications in management as well as human side of the organization.

Unit I   **Evolution and Growth Of Management Thought**   **12 hrs.**

Concepts, Theory and Practice: Evolution of Management Thought - Scientific Management School, Organisational School, Behavioural School, Quantitative School, Integration School, Contemporary School, Operational or management process approach.

Recent Contributions: Patterns of Management Analysis - managerial roles approach, Mc Kinsey's 7-S approach, **Internal and External Environmental analysis. PESTEL analysis***.

Latest concepts and techniques: Global Management- Entry modes, International strategy,

Managerial Functions in International Business*, Japanese and US Management approaches, Re-engineering, TQM, Benchmarking- Six Sigma, ERP, SCM, CRM.

Unit II   **Planning, Organising and Direction**   **12 hrs.**

Planning: Nature, Purpose, Types, Process -Concept of MBO, MBE, MBWA, Objectives, Policies, Procedures, Strategies.

Decision Making: Approaches, Decision Making under Certainty, Uncertainty and Risk, Group Decision Making – Techniques.

Organising: Nature, Types, Levels, Process*, Line/Staff Authority, Decentralisation and Delegation, effective organising.

Direction : Supervision, Span of Supervision, Factors, Graicuna's theory of span of management.

Unit III   **Motivation, Control and Coordination**   **12 hrs.**

Motivation: Elements, Importance, Methods, **Morale.***

Control: Process, Requirements, Standards and Techniques**, Maintenance Vs Crisis Management, Role of IT in control process***.

Coordination: Definition, Characteristics, Objectives, Principles, Techniques.

Leadership: Theories, Models, Approaches - Power and Authority.

Unit IV   **Organisational Behaviour**   **12 hrs.**

Organisational Behaviour: Concept, Nature, Characteristics*, Models,

Individual Behaviour: Personality, Perception, Learning, Attitudes & values.

Group Behaviour: Group Process, Group Tasks, Types, Group Development, Group cohesiveness

Conflict Management: Concept, sources, types, functionality and dysfunctionality, Case incidents.

Unit V   **IT and Management**   **12 hrs.**

Information Technology in Management: Information Challenges, Types of Information System-DSS, MIS, Expert Systems, TPS, Information Technology and Decision Making, **Computer Aided Decision Making***.

Knowledge Management : Fundamentals, Types, KM's leading edge strategies, knowledge worker – new roles and responsibilities, Building knowledge into work activities - identifying, creating, sharing and measuring, knowledge continuum and learning organisations.

(*-Self Study Portion)

Course outcomes:

On the completion of the course students will be able to

1. Gain the rudiments of management which gives valuable insights and equip them with practical operational efficacies in IT Organisation.
2. Ensure adequate capabilities to proactively plan, organise, decide and monitor IT functions and strategies.
3. Hands on experience in designing and implementation of modules that can be practically applied for effective IT administration.
4. Enhance the skill set to understand the challenges and provide appropriate IT interventions.
5. Develop global talents enhancing critical thinking, innovative skills, collaborative team work and holistic skills.

Text books

1. **Aswathappa K.** (2016)**,** *"Organisational Behaviour"*, 12th edition, Himalaya Publishing House, New *Delhi.*
2. **Fred Luthans** (2011), *"Organisational Behavior"*, 12th edition, McGraw Hill Publishing Company, New York.
3. **Ramesh B Rudani** (2013), "*Management and Organisational Behaviour"*, 3rd edition, S. Chand & Company, New Delhi.
4. **V.S.P.Rao, V. Hari Krishna** (2009), *"Management- Text and Cases"*, 2nd edition , Excel Books, New Delhi.

References

1. **Heinz Weihrich and Harold Koontz** (2010), *"Essentials of Management"*, 8th edition, Tata McGraw Hill Publishing Company Limited, New Delhi.
2. **James A.F. Stoner, R. Edward Freedom And Daniel R. Gilbert** (2012), *"Management"*, 10th edition, Prentice Hall Inc., New Jersey.
3. **Prasad, L.M**. (2015), *"Principles and Practice of Management"*, 9th edition, Sultan Chand & Sons, New Delhi.
4. **Ramasamy T.** (2013), *"Principles of Management"*, 2nd edition ,Himalaya Publishing House, New Delhi.
5. **Stephen Robbins, Timothy Judge, Bruce Millet, Maree Boyle** (2013), *"Organisational Behaviour"*, 7th edition ,Pearson Higher Education,AU.
6. **Uma Sekaran** (2005), *"Organisational Behaviour Text & Cases"*, 2nd edition , McGraw Hill Public Company Ltd., New Delhi.2

Accounting for IT Organisations

Semester I   Hrs.of Instruction/week:3T+2 P
20MBMC02   No. of credits   :3

Objectives:
1. Develop an insight into postulates, principles and techniques of accounting.
2. Understand how to utilise the financial and accounting information for planning, decision-making and control.
3. Develop competencies to apply accounting functions in different organisations.

Unit I   Accounting Basics and Final Accounts   15 hrs.

Basics : Definition, Functions, Concepts and Conventions, Accounting Information and its applications, Journal, Ledger, Trial Balance

Final Accounts : Profit and Loss Account and Balance Sheet, Depreciation - **Stock Valuation Methods***

Unit II   Financial Statement Analysis and Accounting Standards   15 hrs.

Financial Statement Analysis: Comparative and Common Size Statements, Trend Percentages, Ratio Analysis, Fund Flow and Cash Flow Statements.

Accounting Standards: Indian Accounting Standards, International Accounting Standards – **IFRS***

Unit III   Management and Cost Accounting   15 hrs.

Management Accounting : Scope, Techniques, Role of Management Accountant, **Difference between financial Accounting and Management Accounting***

Cost Accounting : Understanding and classifying Costs, Absorption Costing, Cost Sheet, **Difference between Cost Accounting and Management Accounting***, Process Costing**.**

Unit IV   Marginal Costing and Standard Costing   15 hrs.

Marginal Costing ; Differential Costing, CVP Analysis – BEP, P/V Ratio, Applications
Standard Costing : Variance Analysis – Material, Labour, **Overhead and Sales Variances***

Unit V   Budgeting and Reporting   15 hrs.

Budgeting: Budgets, Budgetary Control, Types of Budgets – Applications

Reporting to Management : Essentials of Good Report, Format, **Types and Classification***

Case Studies, MS - Excel, Tally etc.

(*-Self Study Portion)

Course outcomes:
On the completion of the course students will be able to
   1. Prepare and analyse the financial statements and interpret the results
   2. Scrutinize the different types of costs associate with the product or service and prepare cost sheets, quotation and tenders
   3. Decide managerial decisions based on the cost volume profit analysis and marginal costing
   4. Investigate the variances in the different costs and overheads.
   5. Prepare master budgets and functional budgets based on the real life situations

Text book:
1. **S N Maheshwari, Sharad K Maheshwari & Suneel K Maheshwari** (2012) *"A Textbook of Accounting For Management*", 3rd edition, Vikas Publishing

References
1. **Periyaswamy .P** (2015), *"Financial, Cost & Management Accounting"*, 2nd edition, Himalaya Publishing House, Mumbai.
2. **Mohammed Arif Pasha** (2015), *"Accounting for Managers"*, 3rd edition, Virinda Publications (P) Ltd., New Delhi.
3. **Bhattacharya, S.K.,and Dearden.J** (2014)*,"Accounting for Management', Text and Cases"*, 3rd edition, Vikas publishing house, New Delhi.
4. **Ghosh.T.P.** (2014), *"IFRSs Simplified",* 1st edition , Taxman Publication Pvt. Ltd., New Delhi.
5. **Sharma R.K. & Shashi K Gupta** (2014), *"Management Accounting Principles and Practices"*, 13th edition , Kalyani Publishers, Delhi.
6. **Wayne L. Winston**(2016*), "Microsoft Excel 2016 Data Analysis and Business Modelling",* 5th edition, Microsoft Press , USA .

Semester I   Hrs.of Instruction /week:4T
20MBMC03   No. of credits   : 3

Objectives:
1.   Elucidate the concepts and techniques in micro economic theory
2.   Provide in-depth knowledge in Macro Economics and emerging global trends.
3.   Enable application of micro and macro economics knowledge in business decision-making

Unit I   Concepts and Techniques   8 hrs.
Themes of economics: Scarcity and efficiency, fundamental economic problems.
Managerial Economics: Fundamental Concepts, Basic techniques, **Objectives of business firms*.**

Unit II   Demand and Supply   16 hrs.
Consumer Preferences: Consumer preference and utility function, utility maximization,
Theory of Demand: Demand Function, Determinants, Elasticity, Estimates and forecasting, Input - Output Decisions.
Production Concepts: Production theory, Cost concepts, **Traditional Cost theory***, Empirical estimates of production and costs.

Unit III   Price – Output and investment Decisions   12 hrs.
Market environment: Types of Market, Price output decision, Industry Analysis of market structure - large group case, small group case, **Pricing strategies and tactics*.**
Profit concepts: Break-even analysis, Applications in Decision making*.

Unit IV   Macro Economics phenomena   12 hrs.
Macro Economics Aggregates: Macro Economic Variables, Consumption Function, Investment Function.
National Income: Concepts, Measurement, **Uses of National Income Data*.**

Unit V   Macro Economics and managerial decisions   12 hrs.
Money Supply and Inflation: Demand and Supply of money, Causes and effects of inflation, Measurement, **Inflation and Decision making*.**
Macro Economic Status and Reforms: Business Cycle, Balance of Payment, Policies – Monetary, Fiscal, Impact on Investment, Synthesis of Monetary and Real Factors.
 (*- Self-Study Portion)

Course outcomes:
On the completion of the course students will be able to
1.   Apply economic principles to management decisions.
2.   Analyze the implications of consumer demand and market supply for pricing and location decisions.
3.   Evaluate the basic forces governing the operation of competitive markets and design competition strategies, including costing, pricing, product differentiation, and market environment according to the nature of products and the structures of the markets.
4.   Understand the factors determining macro economic variables, consumption, investment, employment, the general level of prices, and interest rates and its relevance in business decisions.
5.   Analyse real-world economic and business problems with a systematic theoretical framework and determine the extent to which economic institutions will influence business decisions.

Text Books

1. **Varshney & Maheshwari** (2010), *'Managerial Economics'*, 22nd edition, Sultan Chand & Sons, New Delhi.
2. **P.L.Mehta (2013) ,** *'Managerial Economics Analysis, Problems and Cases'***,** 8th edition, Sultan Chand & Sons, New Delhi**.**

References

1. **Paul A. Samuelson, William D. Nordhaus, Sudip Chaudhuri and Anindya Sen** (2010), "*Economics"*, 19th edition, Tata McGraw Hill, New Delhi.
2. **William Boyes and Michael Melvin** (2005), *"Textbook of Economics*", 3rd edition, Biztantra, New Delhi.
3. **Gregory Mankiw N.** (2007), "*Principles of Economics"*, 6th edition, Thomson Earning, New Delhi.
4. **Richard Lipsey and Alec Charystal** (2011)**, "Economics***"*, 12th edition,   Oxford University Press, New Delhi.
5. **Karl E. Case and Ray C. Fair** (2002), "*Principles of Economics*", 10th edition, Pearson Education Asia, New Delhi.
6. **Adhikary, M.** (2000), *"Business Economics",* 2nd edition, Excel Books, New Delhi.

Marketing of IT Products and Services

Semester I   **Hrs.of Instruction /week:4T**
20MBMC04   **No. of credits   :3**

Objectives

1. Provide a snapshot of evolution of Marketing
2. Portray the impact of changing global, political, economic, competitive, environmental, cultural and social systems on marketing strategy development.
3. Examine the role of consumers as purchasers and users of goods and services using various theories and models of consumer behaviour.
4. Enable formulation of   Marketing 4.0 strategies.
5. Apply knowledge and analytical skills to link marketing activities to value creation.

Unit I Marketing Environment   12 hrs.

Marketing: Concepts, Evolution to marketing 4.0, Marketing systems, Marketing Process and Planning, Marketing Information systems- Concepts and Components.
Analyzing Marketing Opportunities: Marketing Environment Analysis, Buyer Behaviour Analysis. Understanding Consumer and Industrial Markets., **Indian Marketing Environment***
Analyzing Competition: Sales and Demand Forecasting, Industrial analysis.
Buyer Behavior: Culture, subculuture, digital subculture, Power shifts Perception, Attitude , Intention, purchase decisions, post purchase behaviour, buyer behavior models, Purchase behavior Models, technology Adaptation Models, e-commerce models, New customer path- 5A's and O zone.

Unit II   Strategic Marketing   12 hrs.

Marketing strategy: Definition, Analytical Models for Marketing, Strategic Planning- BCG Growth - Share Matrix, General Electric Approach, Ansoff Product/Market Expansion Grid, Blue Ocean Strategy, Strategic marketing in new era,
Strategies - Market Leaders, Challengers, Followers and Niches.
STP Marketing : Market Segmentation- Approach, Procedure and Requirements for effective segmentation, Target Marketing, Product Positioning, Hi tech and Digital product positioning, **Positioning strategies of Brands in India*.**

Unit III   Product and Pricing Decisions   12 hrs.

Product Decisions: Total Product Personality, Product Life Cycle and Strategies, Product Policy, Individual Product Decisions - Attributes, Brand, Packaging and Labelling, Product portfolio-Product Mix Decision, Product Line Decision, New Product Development and Launch.

Pricing: Meaning, Pricing Strategies/Methods, Price changes- Setting, Adapting, Initiating and Responding, integration of taxation in pricing decisions. **Role of Government in Pricing***.

Unit IV   Physical Distribution and Promotion Decisions   12 hrs.

Distribution: Channel Functions, Channel Design and Management Decisions, Strategies- Joint Ventures, Alliances, Retailing, E- Retailing
Physical Distribution: Components, Transportation, Warehousing and Inventory Management, **Practices in India.** Impact on IT
Promotion : Components; Advertising - Definition, Major Factors - Mission, Money, Media, Message and Measurement.Sales Promotion - Definition, Techniques..

Personal Selling : Principles, Sales Force design and Management, **Aggressive selling**.*

Integrated Marketing Communication: Corporate branding, branding, IMC Process: Organizing, Implementing, Evaluation, Control,

Unit V   Specialty Marketing and Government Interventions   12 hrs.

Specialty Markets : Agricultural Marketing, Industrial Marketing, Service Marketing, Marketing of Non-Profit Organizations, Digital marketing .

Government and Marketing: Sale of Goods Act, Public Distribution System and Regulated Markets, Cyber laws, Ethics in marketing, **Consumerism and Consumer Protection in India**.*

(* - Self Study Portion)

Course outcomes:

On the completion of the course students will be able to

1. Formulate marketing strategies that incorporate psychological and sociological factors which influence consumers
2. Develop marketing 4.0 strategies based on product, price, place and promotion objectives.
3. Collect, process, and analyze consumer data to make informed marketing decisions.
4. Analyze marketing problems and provide solutions based on a critical examination of marketing information.
5. Apply knowledge and skills to real-world experiences to innovate and market new product ideas.

Text Books

1. **Philip Kotler, Kevin Keller** (2014), *'Marketing Management'*, 13th Edition, Prentice Hall of India, New Delhi.
2. **Ramaswamy V.S, Namakumari D.** (2013), *'Marketing Management: Global perspective Indian context'*, 5th edition, Macmillan Publishers India Ltd., New Delhi.
3. **Philip Kotler, Hermawan Kartajaya, Iwan Setiawan,** (2016), *'Marketing 4.0: Moving from Traditional to Digital'*, 1st edition, John Wiley and Sons Inc, USA.

References

1. **Biplab B. Bose** (2009), *'Marketing Management'*, 1st edition, Himalaya Publishing House, Mumbai.
2. **Nag A.** (2010)*, 'Strategic Marketing'*, 2nd edition, Macmillan Publishers India Ltd., New Delhi.
3. **Mathur U.C.** (2010)*, 'Strategic Marketing Management: Text and Cases'*, 1st edition, Macmillan Publishers India Ltd., New Delhi.
4. **Warren J. Keegan,** (2013*) 'Global Marketing Management'*, 8th edition, Prentice Hall of India, New Delhi.
5. **Robert G. Cooper** (2011*), 'Product Leadership: Creating and Launching Superior New Product'*, 5th edition, Persus Books Group, USA.
6. **Graham Hooley, Brigitte Nicoulaud, Nigel F.Piery** (2017), *"Marketing Strategy and Competitive Positioning"*, 6th edition, Prentice Hall of India, New Delhi.
7. **Tailor R.K** (2011*)," Modern Marketing Management",* 1st edition, Pointers publishers, Jaipur.

Semester I   Hrs. of Instruction/week:3 T+1 P
20MBMC05   No. of credits   :3

Objectives:

1. Familiarize basic mathematical and statistical techniques for business decision-making applications.
2. Discuss the complexities of business problem for better applications of the techniques.
3. Provide in depth knowledge on understanding data for managerial decisions.

Unit I Mathematical Basis For Managerial Decisions   **12 hrs.**
Concept of Functions: Applications of Functions - Sequence and Series, Arithmetic and Geometric Progressions, Applications to Business.

Differential Equations: Optimization through differentiation, Business Applications
Matrix Operations: Concepts , **Applications in Business*** .

Unit II   Basic Statistical Concepts   **12 hrs.**
Statistical concepts: Summarization of data, Presentation of data , Frequency distribution.

Measures of central tendency: Mathematical Averages – Arithmetic, Geometric and Harmonic mean , Locational Averages- Median, Mode , Partition Values – Quartiles, Deciles and Percentiles, **Practical problems using SPSS*** .

Measures of dispersion: Range, Mean Deviation, Standard Deviation, Variance - Skewness.

Unit III   Correlation And Regression   **12 hrs.**
Correlation: Scatter Diagram, Karl Pearson's coefficient of Correlation, Rank Correlation, Concurrent Deviation Concepts and Definition **, Relevance to Management Decisions***.

Regression: Method of least squares, Curve Fitting.

Unit IV   Probability Theory   **12 hrs.**

Probability: Concepts and Definition- Relevance,   Sample Space and Events, Permutations and Combinations to Probability, **Rules of Probability***.

Probability Distribution: Random Variables and Concept, Distributions - Binomial, Poisson and Normal.   Practical problems using excel.

Unit V   Business Forecasting   **12 hrs.**
Forecasting procedures: Time series analysis - Identification of Trend, Variations in Trend – Secular, Cyclical, Seasonal and Irregular Variations.

Index numbers: Concept, applications, types*, Computation - Simple Aggregate Method,   Weighted Aggregate Method – Laspeyre's Passche's, Fisher's and CPI.

(*Self Study Portion)

Course outcomes:
On the completion of the course students will be able to
1. Acquire a level of proficiency in the fundamental concepts and applications necessary for decision areas requiring knowledge on functions, matrix operations, and differentiation.
2. Learn how to present, analyse and interpret data for business decisions and also to calculate and apply measures of location and measures of dispersion for grouped and ungrouped data cases.

3. Recognise correlation and regression analysis applications for purposes of description and predictions of business data.
4. Apply discrete and continuous probability distributions to various business problems. Further there will be familiarity on how to translate real-world problems into probability models.
5. Understand and apply the concept of stationarity and variability to the analysis of time series data in various contests such as economics, finance, etc., and to quantify changes in various fields domestically and globally.

Text Books

1. **S.C.Gupta** (2016), '*Fundamentals of Statistics'* 1st edition, Himalaya Publishing House, New Delhi.
2. **R.S.N.Pillai and Bagavathi** *(2010), 'Statistics, Theory and Practice* 5th edition, Sultan Chand & Sons, New Delhi.
3. **S.C.Agarwal and T.R.Jain** *(2010)*, 'Quantitative Methods for MBA', 1st edition, VK Enterprises, Chennai.

References

1. **Arora P.N., Sumeet Arora, Mrs.S.Arora, Amit Arora** (2008), *"Comprehensive Statistical Method"* 1st edition, S.Chand & Companies Ltd., New Delhi.

2. **Gupta S.P., M.P. Gupta** (2000), "*Business Statistics"* 16th edition, Sultan Chand & Sons., New Delhi.

3. **Ken Black** (2004), "*Business Statistics for Contemporary Decision –Making"*, 4th Edition, John Wiley, New York.

4. **Kazmier, L.J. and Pohi, N.F.** (2000), *"Basic Statistics for Business and Economics"* 4th edition , McGraw Hill, New York.

5. **Saha.S., S. Mukherji** (2002), *"Quantitative Methods – Mathematical, Statistical Economic Technique"*, 2nd edition, New Central Book Agency (P) , Kolkotta.

System Analysis and Design

Semester I   Hrs.of Instruction /week:4T
20MBMC06   No. of credits   :3

Objectives:
1.   Impart knowledge to deliver high quality, maintainable software projects.
2.   Highlight application of software development life cycle models and methodologies.
3.   Provide a complete overview of software development life cycle using structured and object oriented way.

Unit I   System Development Lifecycle   12 hrs.

Introduction: SDLC Phases, Structured and Object oriented Methodology.
Process Models: Waterfall, V Phased, Evolutionary, Spiral, Prototyping, **DSDM, JAD, PSP/TSP, Extreme programming***, Agile software development, Rational Unified Process.

Unit II   Requirements and Data Flow   12 hrs.

Planning and managing requirements: Eliciting requirements, determining requirements, translating user requirements into system and software requirements, documenting requirements, functional requirements, non-functional requirements, managing requirements.

IEEE Standards: Role and types of standards*, ISO 12207: life cycle standard, IEEE standards for software engineering processes and specifications.

Structured Requirement Representation Techniques: Data Flow Diagram (DFD), Environmental Modelling, Behavioural Modelling, Data dictionary, Entity Relationship Diagram (ERD) - cardinality, optionality.

Unit III   Designing and Testing   12 hrs.

Designing Software System: Introduction , Mapping from Analysis to Design.
Structured Design Representation Techniques -Structured Chart, Module hierarchy, Coupling and Cohesion, Data Design – Normalization.

Software Testing Techniques : Static Testing, Dynamic Testing, Black Box Testing - Equivalence Partitioning, Boundary value analysis, White Box Testing - Basis Path Testing, **Levels of Testing** : Unit Testing and Regression Testing, Integration Testing, System Testing, Acceptance Testing, **Debugging techniques, Break Point, Traces*.**

Unit IV   Object Oriented Modeling   12 hrs.

Object Oriented Way :Object Oriented Methodology- Modeling, Real World Modeling using Objects, Object / Message Paradigm, Classes.

Basic Principles: Abstract Data Types, Messages and methods, Encapsulation, Polymorphism, Ad-hoc polymorphism – overloading, Dynamic binding, Inheritance, **Inheritance versus Aggregation*,** Representation Techniques using UML-Use Case diagram, Use Case Specification, Four Principles, Conceptual Model.

Unit V   Developing and Designing Systems   12 hrs.

Object Oriented Methods: Designing Software System- Object Oriented Design, Representation Techniques using UML - Class Diagram and Relationships, CRC Card, Interaction Diagram, Sequence Diagram, Collaboration diagram, Package Diagram, State Chart Diagram, Activity Diagram, Physical Diagram, Component Diagram, Deployment Diagram.

OOUI: Characteristics of an OOUI - Mapping the User model, User's conceptual model, Programmer's model, Designer's model, - **GUI Components***.

(*-Self Study Portion)

Course outcomes:
On the completion of the course students will be able to
1. Describe the phases of system development life cycle, the process model and agile software development.
2. Develop data flow diagrams, entity relationship diagram and perform feasibility study.
3. Determine the methods for evaluating the effectiveness and efficiency of a system by doing various levels of testing.
4. Demonstrate the knowledge on object oriented modeling and its basic principles
5. Develop design a database for storing data and a user interface for data input and output, as well as controls to protect the system and its data.

Text Book:
1. **Jeffery A. Hoffer, Joey F. George & Joseph S. Valacich** (2014), *"Essentials of System Analysis and Design",* 6th edition, Pearson Education, New Jersey.

References
1. **Bernd Bruegge and Allen H. Dutoit** (2010)*, "Object-Oriented Software Engineering: Using UML Patterns and Java"*, 10th edition, Prentice Hall, USA.
2. **Carlo Ghezzi, Mehdi Jazayeri and Dino Mandrioli** *(*2003), *'Fundamentals of Software Engineering'*, 2nd Edition, Prentice Hall of India, New Delhi .
3. **Kendall & Kendall** (2008), *"Systems Analysis and Design"* 9th edition, Prentice Hall Inc., USA.
4. **Grady Booch, James Rumbaugh and Ivar Jacobson** (2008), *"The Unified Modeling Language User Guide"* , 8th edition, Pearson Education, New Jersey.
5. **Jeffery A. Hoffer, Joey F. George & Joseph S. Valacich** (2012)*, "Modern System Analysis and Design,* 4th edition, Pearson Education, New Jersey.

Data–Strategic Organizational Resource (RDBMS)

Semester I   **Hrs.of Instruction/week:4 P**

20MBMC07   **No. of credits   :2**

Objectives:
1. Impart basic knowledge on computer based data management systems
2. Enhance competency to design and develop a RDBMS
3. Develop Proficiency in Oracle for database management.

Unit I   Database Management Systems   **12 hrs.**

Data : Fields, Records, Files

Databases : <u>File Processing and Access Methods</u>*, Database Models - Object Oriented, Record Based, Network, Relational.

Entity Relational Modeling: ER Diagrams, Normalization – 3 Normal Forms, Functional/ Trivial /Partial Dependencies, File Organizations- Head, Sort, Hash, Clustered, Index.

Unit II   Introduction to SQL   **12 hrs.**

Concept of Tables/Relations: SQL– DDL, DML, DCL, Defining a database status:- CREATE, ALTER, DROP, TRUNCATE, Manipulation of the data of a database-INSERT, INSERT ALL, UPDATE, DELETE, MERGE-SELECT command and options., <u>SET operations</u>*, Control data access - GRANT, REVOKE, USER ROLE PRIVILEGE - Control transactions and its consistency - COMMIT, ROLLBACK, SAVEPOINT, **<u>E.F. Codd's 12 Rules for RDBMS</u>***

Unit III   Queries and SL Functions   **12 hrs.**

Operators in SQL* Plus : Arithmetic, Comparison, Logical, **<u>Operator Precedence</u>***
SQL*Plus Functions: Single Row, Date, Character, Numeric, Mod, Sign, Conversion Functions, Miscellaneous Functions.

Group Functions: Group by Clause, Having Clause.
<u>Queries using MYSQL</u>*

Unit IV   Advanced SQL   **12 hrs.**

Multiple tables of a Database : queries generation, JOINS - Use sub queries, generate complex queries, data conditionally from multiple tables, SUB QUERIES.
<u>Multiple Tables and Joins using MYSQL</u>*

Unit V   Constraints   **12 hrs.**

Integrity Constraints: Domain, Entity, Referential.
Implementation of Constraints: Domain Integrity – 'Not null' Constraint, Check Constraints – Table level and column level Constraints , Entity Integrity Constraints – Unique Constraints, Primary key Constraints. Referential Integrity Constraints – On Delete Cascade Clause.

PL/SQL: Functions, Triggers, Cursors & Exceptions

<u>GUI Form design using PHP</u>*
<u>*Self Study Portion</u>

Course outcomes:
On the completion of the course students will be able to
1. Describe the basic concepts of Database Management Systems and design a data model and Schema in RDBMS
2. Understand and be competent in use of Structured Query Language SQL
3. Analyze and apply the operators and functions in SQL
4. Implement advanced SQL concepts and able to do Database Recovery and Query Optimization
5. Develop competencies to create constraints and use RDBMS for developing industry application

Text Book
1. **Calkins B**. (2013), *"Oracle Solaris 11 System Administration"*, 5th Edition, Pearson Education Pvt. Ltd., Delhi .

References
1. **Rittman, Mark (2012), *"Oracle Business Intelligence 11g Developers Guide"*, 1st Edition McGraw-Hill Education, USA.**
2. **P.S. Deshpande** (2011), *"SQL and PL/SQL for Oracle 11g Black Book"*, 1st Edition, Dreamtech Press Publisher, Tamil Nadu.
3. **Byrla** (2013), *"Oracle Database 12C: The Complete Reference"*, 7th Edition, McGraw Hill Education; USA.
4. **Ivan Bayross,** (2010), **"SQL, PL/SQL the Programming Language of Oracle"**, 3rd Edition, BPB Publications, New Delhi.
5. *Systems and Developers Manuals for RDBMS and Oracle IBM Manual for Relational Database Management Systems***.**
6. **Christopher Allen, Catherine Creary And Simon Chatwin** (2004), *"Introduction to relational Data base"*, 4th Edition, Tata McGraw Hill, New Delhi.
7. **Robert Sheldon** (2008), *"SQL: A beginners Guide"*, 3rd Edition, Tata McGraw Hill, New Delhi.

Semester I   **Hrs.of Instruction /week:4P**

20MBMC08   **No. of credits   :2**

Objectives:

1. Impart foundation for designing effective messages, both written and oral, from concept to delivery.
2. Develop and deliver individual presentation, using appropriate and effective visual support.
3. Practice drafting and editing clear, precise, and readable written business documents
4. Impart skills for managing meetings, dealing with conflict, and leveraging the power of diversity, at both the individual and cultural level.

Unit I   Foundation   **12 hrs.**

Business Communication: Concept, Process, Barriers, Characteristics of effective business communication

Oral and online presentation : Design, development and delivery, Enhancing presentations with slides and other visuals, Public speaking skills, Body language and Modulations.

Team & interpersonal communication: Advantages and disadvantages, **Guidelines for successful collaborative writing***, Social networking technologies in business communication,Importance of listening, Business etiquette & nonverbal communication

Training in listening and comprehension, Word, Powerpoint, Document and Video sharing (Libre Office and MS Office).

Unit II   Official Communications   **12 hrs.**

Message : Three-Step Writing Process, Importance of analyzing the situation before writing a message, Information-gathering options, Importance of good organization. **Differences between the direct and indirect approaches to organizing a message***, Crafting Brief Messages, Crafting messages for electronic media, Writing routine and positive messages, Negative messages, Writing positive messages.

Internal: Agenda, Memos, Circular, Notices.

External: Quotations, Orders and Tenders, Sales, Claim, Adjustments, Credit Collection.

(Training in concept writing , development of templates, notice board displays , Web and social media communications.)

Unit III   Employment Communication   **12 hrs.**

Employment Messages: Building Careers and Writing Resumes.

Group Discussion: Guidelines, Do's and Dont's during G.D.

Interviews: Applying and Interviewing for Employment, Exemplify employer-employee/interviewer-interviewee relationships.

Do's and Dont's during Interview*.

(Training in design and conduct of interviews, conduct of interview through conference calls .)

Unit IV Reports and Pubilicity   **12 hrs.**

Reports and proposals : Planning, Writing, and Completing Reports and Proposals.

Specimen reports and templates design : Minutes, Business cases, **Business process reporting*,** Reports of the Board of Directors, Annual general meetings reports and Press release.

Publicity: Internal organs **,** Communication with Media, Press Report, Website and social media communication – **profiles in social media***, blogs , webpages.

Training in use of Word, Excel, Access for report generation and presentation, Document and video sharing applications.

Unit V   Managerial Skills   12 hrs.

Creativity: Creative Thinking, Valuing diversity in thinking - Thinking preferences, Creativity styles, Creativity in problem solving- Problem Definition, Pattern Breaking - paradigm shift, Challenging conventional wisdom, Lateral thinking, provocation, **Mind stimulation- games, brain twisters and puzzles*.**.

Leadership skills: Role model identification , roleplays , Simulation Game-varied topics, Negotiation and Conflict settlement, gaming cultural sensitive issues.

(Training in Personality study and interpretations, concept development, design and execution of games).

Course outcomes:
On the completion of the course students will be able to
1. Effectively use various types of oral, written and digital communication modes to gear a range of business audiences.
2. Participate in team activities which lead to the development of team spirit.
3. Create and modify correct business documents using computer technology.
4. Acquire the professional development skills and plan for transition-to-work and career progression purposes
5. Develop interpersonal skills for contribution towards effective and satisfying personal, social and professional relationships, as well as the Utilization of electronic presentation software.

Text books
1. **Rajendra Pal, Korlahalli. J** *(2011), 'Essentials of Business Communication',* 11th edition, Sultan Chand & Sons, New Delhi.
2. **Dona J Yong** (2006), *'Foundation of Business Communication'*, 1 st edition, Tata McGraw Hill Publishing House, New Delhi.

References
1. **Ramachandran** *(2008), 'Business Communication'* , 1st edition, Macmillan India Ltd., New Delhi.
2. **Krishna Mohan, Meena Banerji** (2002), *'Developing Communication Skills'*, 2nd edition, Macmillan India ltd, New Delhi.
3. **Urmila Rai, S.M. Rai** (2001*), 'Business Communication'*, 4th edition, Himalaya Publishing House, Mumbai.
4. **Gorman** (2000*), 'The Complete Idiot's Almanac of Business Letters and Memos'*, 2 nd edition, Prentice Hall of India Pvt Ltd., New Delhi.
5. **Reddy, Appannaiah, Nagaraj Raja Rao** (2000), *'Essentials of Business Communication'*, 1st edition, Himalaya Publishing House, New Delhi.

Research Methods for Management

Semester II	Hrs.of Instruction /week:2 T+2P
20MBMC09	No. of credits :3

Objectives:

1. Elucidate basic statistical techniques for business decision-making applications.
2. Develop the skills to operate statistical software packages
3. Build competencies to effectively document and apply research results.

Unit I   Preliminary Aspects   12 hrs.
Research: Process, Design, Ethics.

Problem selection- Statement of the problem - Concept of theory: empiricism, deductive and inductive theory, **Characteristics of scientific method***.

Research Design: Concept, Types, Features.

Unit II   Creating a Research Design   12 hrs.
Secondary Data: Nature, Published, Computerised databases.

Qualitative Research: Definition, Focus Groups , Projective Technique.

Primary Data Collection: Survey- Errors, Types, Factors, Limitation, Observation -Nature, Approaches, Human Approach, Machine Observation, Experimentation **-** Concept, Designs.

Data collection instruments (questionnaire, schedules and checklist)*.

Unit III   Data Acquisition, Sampling and processing   12 hrs.
Measurement: Construct, Variable, Reliability and Validity-Attitude Measurement, Types of scales

Sampling: Population, Sample plan-methods, Sampling distribution-mean,variance, proposition, sample size determination and adequacy.

Representation of Data: Validating and Editing, Coding, Tabulation, **Graphical Representation***, Interpretations - Measures of Central Tendency.

Unit IV   Data Analysis   12 hrs.
Hypothesis test: Steps, errors, Test of hypothesis - Means, Proportions, Variance, Independence of categorized data, Goodness of fit.

Non parametric tests: One sample test- One sample sign test, Chi-square test , Kolmogorov- Smirnov test, Run test for Randomness; Two sample test- Two sample sign test, Two sample median test, Mann – Whitney U test; K sample test- K sample Median test, Kruskal Wallis test.

Data Analysis using computer packages: Processing of data with statistical analysis -**Hypothesis testing using computer packages*** - Application of SPSS.

Unit V   Multivariate Analysis and Report Writing   12 hrs.
Basic Multivariate Analysis : Correlation analysis - Co-efficient for ungrouped data, Coefficient for grouped data, Rank correlation, Auto correlation, Forecasting applications, Regression and time series - Simple regression , Multiple regression , time series analysis.

Advanced Multivariate Techniques: Cluster Analysis, Factor Analysis, Discriminant Analysis, Multidimensional scaling and Conjoint Analysis, Computation using SPSS.

Report Writing: Structure, Components, Documentation, Presentation **, Business Reports*.**

 (*-Self Study Portion)

Course outcomes:
On the completion of the course students will be able to
1. Identify research problem and formulate appropriate research design independently.
2. Carry out systematic research and apply suitable technique for data collection.
3. Apply relevant sampling technique in data collection and process the data.
4. Analyse and interpret data using SPSS statistical package.
5. Write project report with relevant structure and contents.

Text Books

1. **S. N. Murthy, U. Bhojanna** (2010)**, *"Business Research Methods*",** 3rd edition**,** Excel Books New Delhi.
2. **Panneerselvam. R**(2016), *Research Methodology***,** 2nd edition, PHI Publications, New Delhi.

References

1. *Aditham B Rao* (2007), *"Quantitative Techniques in Business",* 2nd edition*,* Jaico Publishing House, Mumbai.
2. *Gupta S.P., M.P.* Gupta (2007*), "Business Statistics"*, 14th edition, Sultan Chand & Sons., New Delhi.
3. *Panerselvam R.* (2009), *"Research Methodology"*, 1st edition, Pearson Publications, New Delhi
4. *Donald R. Cooper, Pamela S. Schindler and J K Sharma* (2012), "**Business Research methods**", 11th Edition, Tata McGraw Hill, New Delhi.
5. *Alan Bryman and Emma Bell* (2011), *"Business Research Methods"*, 3rd edition, Oxford University Press, New Delhi.
6. *Uma Sekaran and Roger Bougie* (2012), *"Research Methods for Business"*, 5th edition, Wiley India, New Delhi.
7. *William G Zikmund, Barry J Babin, Jon C.Carr, Atanu Adhikari, Mitch Griffin* (2012), "*Business Research Methods*", A South Asian Perspective, 8th edition, Cengage Learning, New Delhi.
8. *Carl Mc Daniel, Jr. Roger Gates* (1996), *"Contemporary Marketing Research"*, 2nd edition, West Publishing Company, New York.
9. **Neuman** (2014), "*Social Research Methods: Qualitative and Quantitative Approaches***,**" 7th edition, Pearson Publications, New Delhi

IT Project and Operations Management

Semester II   Hrs.of Instruction /week:3T+1P
20MBMC10   No. of credits   :3

Objectives:

1. Develop competencies to use project management packages.
2. Provide insights on project and operations functions in IT organizations.
3. Train on systematic management of projects

Unit I   Introduction   12 hrs.

Operations management: Meaning, Operations as a system, Operations Strategies, Operations technology, Forecasting, Productivity.

Product and Process Design: Product design, Product Development process - Approaches, Process Planning and Design, Process analysis – Process flowcharting , Types of processes, Process selections, Process design – Job, Batch, Assembly line, Continuous production, Measuring process performance, **Value Engineering***

Unit II   Facility Location and Layout   12 hrs.

Facility Location: Location decisions , Types of operation centres – offshore, near shore, back-up centers, Location Models.
Facility Layout: Types– Product, Process, Fixed position, Cellular, Group technology, Service layout, Assembly Line balancing, **Computerised Layout techniques – CRAFT, SLP*.**

Capacity and Aggregate Planning: concepts , Long term and short term capacity strategies, Aggregate Planning, MRP; Master Production Scheduling - Procedures, MPS in produce to stock and produced to order firms, Computerised MPS - Sourcing or outsourcing decisions, Make or buy decisions.

Unit III   Project Formation and Appraisal   12 hrs.

Project Life Cycle: Feasibility & Technical Analysis, Market and Demand Analysis - Economic and Financial Analysis, **Formulation of Detailed Project Reports*.**

Project Planning and Scheduling: Structuring projects – Work Breakdown Structure (WBS), Time Scales, Network Analysis , Time-cost models , Resource management.

Unit IV   Project Implementation, Control and Evaluation   12 hrs.

Project Management Information System: Integrated project management control systems, Managing Transition from Project to Operations, Project Review , **Project Quality Assurance*,** Project management software.

Unit V   Total Quality Management   12 hrs.

Quality Techniques: Statistical process control, Acceptance plans,

Total Quality Management Concepts: Deming's way, Kaizen Technique, Quality circles, TQM, TPM, Six sigma, **Quality standards – ISO and BS7799 and other international standards*.**
(*- Self Study Portion)

Course Outcomes

On completion of the course students will be able to:

1. Gain ability to recognize situations in a operation system environment and familiarize on basic project management process.
2. Understand and develop deep insight on location economics and layout planning for IT organisation.
3. Evaluate the feasibility of the project across various functional parameters and will be able to prepare feasibility report for project acceptance.
4. Imbibe a holistic knowledge in understanding the significance of quality and its interfaces with other functional areas.
5. Apply Project Management software for project planning, scheduling and implementation.

Text Books

1. **Krajewski, Ritzman, and Malhotra** (2012), "*Operations Management*: **Processes and Supply Chains**", 10th Edition, Prentice Hall, New Jersey.
2. **Frederick Harrison and Dennis Lock** (2004)**,** '*Advanced Project Management*' Routledge, 2nd edition, Wiley Publications, New Delhi.

References

1. **Aswathappa.K & Sridhara Bhatt** (2010), "*Production and Operations Management*", 2nd edition, Himalaya Publishing House, Mumbai.
2. **Chase, Shankar, Jacob & Aquilano** (2010), "*Operations & Supply Management*", 12th Edition, Tata McGraw Hill, New Delhi.
3. **Suganthi L., Anand A. Samue**l (2009), "*Total Quality Management*", 1st edition, Prentice Hall of India Private Ltd., New Delhi.
4. **Khanna .K.K** (2008), "*Physical Distribution Management: Logistical Approach*", 4th edition, Himalaya Publishing House, Mumbai.
5. **Dan R.Reid; Sanders R. Nada** (2008), "*Operations Management – An Integrated Approach*", 3rd Edition, Wiley India (P) Ltd., New Delhi.
6. **Paneerselvam R.** (2005), "*Production and operations Management*", 2nd edition, Prentice Hall of India Pvt. Ltd., New Delhi.
7. **Erik Larson, Clifford Gray** (2010), "*Project Management: the managerial process*", 5th edition, McGraw-Hill/Irwin, US.
8. **Prasanna Chandra** (2011), '*Projects-Planning, Analysis, Selection, Financing, Implementation and Review*', 7th edition, Tata Mcgraw-Hill Publishing Co Ltd, New Delhi.
9. **Dale F. Cooper** (2005), '*Project Risk Management Guidelines: Managing Risk in Large projects and Complex Procurements*', 2nd edition, John Wiley& Sons Ltd, West Sussex.

Financial Management

Semester II   Hrs.of Instruction /week:3T+1P
20MBMC11   No. of credits   :3

Objectives:

1. Elucidate the broad framework of financial decision-making
2. Familiarize emerging global trends in financial environment.
3. Provide in depth knowledge in financial techniques.

Unit I   Concept, Sources and Time Value of Money   12 hrs.

Concepts: Objectives, Finance Functions/Decisions, Scope - Financial Organization**, Roles and Functions of Financial Manager*.**

Sources of Finance: Long-term and Short term – Domestic and International Markets – **Forex Markets*.**

Time Value of Money –Future Value, Present Value, Applications.

Unit II   Investment Decisions   12 hrs.

Capital Budgeting: Significance, Discounted and Non-Discounted Techniques – **Capital Rationing*.**

Complex Investment Decisions: Mutually Exclusive Projects, Replacement Decisions, Projects with different lives .

Risk Analysis: Standard Deviation, Coefficient of Variation, Risk Adjusted Discount Rate, Certainty Equivalent, Sensitivity Analysis, Scenario Analysis, Simulation Analysis, Decision Trees for Sequential Investment Decisions – **Utility Theory*.**

Unit III   Financing Decisions   12 hrs.

Cost of Capital – Specific cost and WACC - **Valuation of Securities.***

Leverage: Financial, Operating, Combined leverages – EBIT –EPS Analysis – Applications.

Capital Structure – NI, Traditional, NOI and MM Hypothesis – **Pecking Order Theory*.**

Unit IV   Dividend Decisions   12 hrs.

Theories: Walter, Gordon, MM Hypothesis.

Policies: Objectives, Factors influencing dividend policy, **Stability and Forms of Dividends*.**

Unit V   Working Capital Management and FIS   12 hrs.

Principles: Concepts, Operating and Cash Cycle, Types, Determinants, Estimation of working capital Requirement.

Components: Receivables, Inventory and Cash Management – **Working Capital Finance***.

Financial Information Systems: Application of MIS in finance - Application soft ware – **Internet applications***   Case studies, MS Excel.
(*-Self Study Portion)

Course Outcomes

On completion of the course students will be able to:

1. Understand both the theoretical and practical role of financial management in business corporations.
2. Determine risk and return and explain the trade-off between risk and return and compute the value of various financial assets such as equities, bonds, stocks, retained earnings.
3. Apply the concepts of financial management to present-day financial events.
4. Access financial information from a wide variety of sources and use this information to research for the development of the concerns
5. Relate capital investment decisions and financial policies to business valuations.

Text Books:

1. **Khan M.Y. & Jain P.K.** (2016), *"Financial management Text, Problems & Cases"*, 8th edition, Tata McGraw Hill Publishing Company Limited, New Delhi.

References

1. **Chandra Prasanna**(2016),*"Financial Management: Theory and Practice"*, 9th edition, McGraw Hill Education (India) Private Limited, New Delhi.
2. **Pandey I.M** *(2013)*, "*Financial Management"*, 10th edition, Vikas Publishing House Pvt Ltd, Noida.
3. **Van Horne, James, C**; **Wachowicz, John M.** (2009), *"Fundamentals of Financial Management"*, 13th edition, Prentice Hall of India Publication, New Delhi.
4. **Bhalla, V.K**. *(2014), "Financial Management"*, 1st edition, S.Chand Publishing, New Delhi.
5. **Maheswari, S.N**. (2014)*, "Financial Management – Principles & Practice"*, 14th edition, Sultan Chand & Sons, New Delhi.
6. **Wayne L. Winston** (2009), *"Microsoft Excel 2013 Data Analysis and Business Modelling"*, 1st edition, Prentice Hall of India Publication, New Delhi.
7. **Sudarsana Reddy** (2015), *"Financial Management - Principles and Practice"*, 3rd Revised edition, Himalaya Publishing House Pvt Ltd., Mumbai.

Human Resource Information System

Semester II   **Hrs.of Instruction /week:3T+1P**
20MBMC12   **No. of credits   :3**

Objectives:

1. Focus on the concepts of Human Resources Development
2. Develop skills to apply human resources development techniques in IT Organisations.
3. Enhance knowledge on HR Applications for IT Organisations
4. Provide insights of eHRM Process and HR analytics

Unit I   Introduction   12 hrs.

Human Resource Management: Strategic Role, Human Resource and Technology, Human Resource Model- Toyoto model, Ten C model, Michigan Model, Harvard Model, David Guest model, HRM strategy, HRM practices, HRM outcomes-Behavioural outcomes, Performance outcomes , Financial outcomes.

HRM Activities: Transformational, Traditional, Transactional functions, HR policies, strategies.

HRIS: Definition, Objective, Setting up HRIS, Computerized HRIS, **Transformation of the role of HR in Digital Age* .**

Unit II   Analysis and Design of Work   12 hrs.

Manpower planning: Nature-Process-Barriers, Job Analysis, Job Description, Job Specification, Job Evaluation Methods.
New Work place- Specialized to enlarged jobs, competency-based job analysis, Job design Approaches- Mechanistic, Motivational , Biological , Perceptual **, Contemporary issues*.**

Unit III   Recruitment and Selection   12 hrs.

Recruitment: Process, e-recruitment Model, Recruitment policy, Resumes management systems, Attributes of recruitment Websites.

Selection- Process, Types, Tests, Online assessment, e-selection decision point, Socialisation.

Placement: Orientation*, Placement-Requisites, Evaluation and problems - Video supplements.

Unit IV   Human Resource Maintenance   12 hrs.

Human Resource Maintenance: Performance Appraisal - process, problems, solutions , PMS cycle-Model ,Innovative Approaches, content , process, New Performance Management System.

Compensation: Monetary and non monetary benefits, Calculation of payroll, Employee incentive schemes, **e-compensation- Tools for managing internal and external equities***

Training and Development: Training - Need Analysis, **Process***, Models -Design and Development, Learning cycle-Learning Curve, Four level model for training , Evaluation- Donald Kirkpatrick's Evaluation Model, Five phase model for competency Assessment and Development – video supplements – experiential exercise.
Managing careers: Career anchors , process map, career development models , **Integrating career planning into Human Resource Information System**.

Unit V   Basic IT Applications in HRM   **12 hrs.**

Human Resource Management and Technology: Emotional Intelligence, Knowledge Management-Business Process Outsourcing, HR Analytics.

Technologies for HRM effectiveness – Transaction processing, DSS, KBS, ES, Interactive Voice technology, Imaging, -e-enabled delivery of HRM , Measuring Human Resources' contribution, Metrics, Human Resource score card

Application of RDBMS-   Module creation- Attendance tracking system-personality profiling for selection- User interactive orientation-Payroll processing, **Challenges of HR Manager in IT organisations*.**

(*- Self Study Portion)

Course outcomes:
On the completion of the course students will be able to
1. Illustrate the strategic issues in HR and design an appropriate HR model for IT and ITES organisations.
2. Exhibit work behavior with competencies and skill sets to manage disruptions in Knowledge economy.
3. Reflect on the impact of eHRM process on other operations to achieve organization excellence.
4. Handle cross cultural and team based HR challenges to develop networked and virtual organizations.
5. Work as a strategic partner to analyse internal capabilities and create HR as a business enabler.

Text Books
1. **Aswathappa.K** (2015), **"*HRM Text and Cases*"**, 12th edition, Tata McGraw Hill Publishing Co.,Ltd., New Delhi.
2. **Seema Sanghvi** (2014), *Human Resource Management*, 1st edition, Vikas Publishing Pvt House,New Delhi.
3. **Rao.V.S.P.** (2005) , **"*HRM Text and Cases*"**, 2nd edition, Excel Books, New Delhi.
   Michael J. Kavanagh & Mohan Thite (2011) **"Human Resource Information Systems"** Basics, Applications and Future Directions, 3rd edition, Sage Publications India Pvt Ltd, New Delhi.

References
1. **Raymond A Noe, John R Hollenbeck, Barry Gerhart, Patrrick M Wright** (2014), **"*Human Resource Management-Gaining A Competitive Advantage*"**, 9th edition, Tata McGraw Hill, New York.
2. **Aswathappa.K**(2013), **"*HRM Text and Cases*"**, 7th edition, Tata McGraw Hill Publishing Co., Ltd., New Delhi..
3. **Raymond J Stone** (2014), **"*Human Resources Management*"**, 8th edition, John Wiley & Sons, Singapore.
4. **Sahu.R.K.** (2009), **"*Performance Management System*"**, 4th edition, Excel Books, New Delhi.
5. **Gary Dessler** (2013), **"*Human Resource Management*"**, 12th edition, Prentice Hall Of India Private ltd, New Delhi.
6. **Rao.V.S.P.** (2005), **"*HRM Text and Cases*"**, 2rd edition, Excel Books, New Delhi.
7. **Hal G.Gueuetal, Dianna L. Stone** (2005), "*The Brave New World of eHR*", 1st edition, John Wiley India, NewDelhi.
8. **Subbarao** (2010), **"*Essentials of HRM and Industrial Relations*"**, 5th edition, Himalaya Publishers Co., New Delhi.

<p style="text-align: center;">**Business Process and Information Technology**</p>

Semester II   Hrs.of Instruction /week:3T+1P
20MBMC13   No. of credits   :3

Objectives:
1. Provide basic understanding of systems management.
2. Discuss various process and people issues in systems management.
3. Describe the use of technology to develop and integrate systems management process.

Unit I   IT in Organisations   12 hrs.

Introduction: IT developments and trends, Information systems concepts and Classifications, Information infrastructure and Architecture, managing Information resources.

Strategic Information Systems: Porter's competitive forces model and strategies, Value chain models, Strategic Information Systems Framework and applications, **Technology as a driving force of global industrial competition*, Axes and Atlas of technology** .

Unit II   IT Planning and People Management   12 hrs.

Planning for Information Technology and Systems: IT Planning, Models for IT planning, Strategic information Planning, Information Requirements Analysis, Planning Information Technology Architecture, **Guidelines for IT planning.***

People management in IT organisation: Acquiring Executive Support, Organising and Staffing for Systems management, Customer service, **Developing a learning organisation***.

Unit III   Process Issues and Management   12 hrs.

IT Systems Process and Control: Systems Availability, Production Acceptance, Performance and Tuning, Strategic Security, Disaster Recovery.

Infrastructure & Systems Management: Network Management, Storage Management, Configuration Management, Facilities Management**, Capacity Planning***

Unit IV   Systems Management and BPR   12hrs.

Integrated Systems Management: Developing Robust Processes, Relationship between System and Tactics Management, Change Management, Problem Management.
Specialised Systems environment: Special consideration for client server and web enabled environment.
Business Process Reengineering and Information technology: Basic Concepts, Need for BPR, Principles, Role, BPR and Restructuring the organisation, Networked organisation, Virtual organizations, **Implementing reengineering*.**

Unit V   Managing Technology and Innovation   12hrs.

Innovation Management: Productivity and Incremental Innovation, Principles, Types, Innovation capabilities, managerial styles and practices, Artificial intelligence, Virtual reality – Applications in corporate environment, **Factors facilitating and hindering technovation.***

Cloud Computing : Definition, Cloud Services Model, Deployment Model, Cloud Computing Reference Model, Deployment options and solutions for building cloud infrastructure, Key resource management techniques, Security threats and solutions, Service operations Management –Monitoring Parameters, Alerting, Reporting.

(*-Self Study Portion)

Course Outcomes

On the completion of the course students will be able to

1. Develop ICT Strategic Vision, ICT Plans , Processes and Policies
2. Align IT Business Plans to Corporate Strategies
3. Plan ICT infrastructure Management Process and Design ICT Policies
4. Apply Innovation Management Skills to design Internet of Things
5. Update the ICT processes and Policies to incorporate technological changes.

Text Book

1. **Schiesser Rich** (2009), **"*IT Systems Management – designing, implementing and managing world - class infrastructures"*,** 2nd edition, Prentice Hall of India Private Limited, New Delhi.

References

1 **Schiesser Rich** (2010), **"*IT Systems Management"***, 2nd edition, Pearson Education, Boston.
2 **Efraim Turban, Ephraim McLean, and James Wetherbe** (2008)**, "*Information Technology for management-making connections for Strategic Advantage"*,** 2nd edition, John Wiley & Sons.Inc,, USA
3 **Vijay Kumar Kurana** (2009), *"Management of Technology and Innovation"*, 1st edition**,** Ane Books, New Delhi.
4 **Jaiswal and Garg** (2008), "*Enterprise Systems and business process Management-Global Best Practices",* 1st edition Macmillan Publishers, London.
5 **Harris Kern, Stuart Galap and Guy Nemiro** (2000), "*IT Organisation: Building a World class Infrastructure",* 1st edition**,** Prentice Hall, USA.

Enterprise Resource Planning

Semester II   Hrs.of Instruction /week:4P
20MBMC14   No. of credits   :2

Objectives:
1.   Discuss the role of ERP in organizations.
2.   Gain insights into various modules of ERP system and their interrelation
3.   Enhance the knowledge on customization of ERP Applications.

Unit I   Order processing and Purchase   12 hrs.

ERP : Evolution, Advantages of ERP, Integrated Management Information, Business Modeling, Integrated Data Model.

Technology: C/SIDE Development Environment, Server Options, Navigator Application Server, Multilanguage Functionality.

Sales order processing and management : Sales master, Table design and creation, Creating sales quota, Sales order, Processing sales order and receivables, Managing sales prices, line and invoice discounts, Sale of non stock items, Order processing, Estimating, Order process and transfer order receipts,
 sales analysis and reporting*.

Purchase order processing and management: Purchase order, creation, receiving and invoicing, purchase master, design and creation, managing purchase prices, discounts and line discounts, purchase order analysis reporting.

Unit II   Manufacturing   12 hrs.

Overview: Items and item card, Production bill of material, Routing, Planning, Production order, consumption and output journals, Finishing orders and auto reporting.

Inventory management: Inventory valuation, Inventory age composition, Item register, Order processing, Returns management, **Item tracking, Location transfers, Cycle counting***.

Advance manufacturing: Trade and inventory - BOM scrap and routing scrap, Non-productive time, Parallel scheduling, Multi-level manufacturing, Serial and lot number processing, Sales prices and discounts, Purchase order management, Item charges, Requisition management.

Unit III   Human Resources and Finance   12 hrs.

HR: Maintain comprehensive employee records - Absence tracking methods, Track equipment issued to employees, Employee absence reports, Staff absence register, Employee birthday report, Payroll management.

Finance: Overview, Chart to accounts, General ledger, Receivables management, Payable management, Journals, Posting transaction to the general ledger, Taxation India localization (VAT).

Other functional areas: Marketing, Resource planning, Service management, Business notification, **e-commerce***.

Unit IV   Database concepts   12 hrs.

Types of concepts: Standard database, SQL server option
Dynamic NAV database administration: Basic and advanced database features, understanding backup, restore database in the SQL server option, **advanced backup and restore information.***

Unit V   Development of the database   12 hrs.

Basics : Tables, Forms, Introduction to C/AL programming, Intrinsic data types, Identifiers and variables, Assignment statements, Simple expressions, Terms and operators, Numeric expressions, Logical and relation expressions, Arrays, Reports.

Understanding Customisation using PHP, MySQL and Java Business Application

(*-Self Study Portion)

Course outcomes:
On the completion of the course the students will be able to
1.   Comprehend the technical aspects of ERP systems and to understand the concepts of order processing, purchase, and sales management.
2.   Create item card, BOM, item register, order processing, scheduling, and purchase order management using Manufacturing Module
3.   Analyze the employee absence report, payroll management, and exhibit general ledger, receivables and payables management using HR and Finance Module.
4.   Understand the advanced database features, backup and restore of information.
5.   Obtain practical hands on experience with ERP software and describe the selection, acquisition and implementation of enterprise systems and customization using PHP, MY SQL and Java Business Application

Text Books

1.   **Alexis Leon** (2014), *"Enterprise Resource Planning"*, 3rd edition, Tata McGraw Hill, New Delhi.

References

1.   **Alexis Leon** (2008), *"ERP Demystified"*, 2nd edition, Tata McGraw Hill, New Delhi.
2.   **Steven Renders** (2015), "*Microsoft Dynamics NAV 2009: Professional Reporting"*, 1st edition, Packt Publishing Enterprise, Mumbai.
3.   **Rajesh Ray** (2011), *"Enterprise Resource Planning"*, 1st edition, Tata McGraw Hill, New Delhi.
4.   **Promod M Mantravadi** (2006), "*ERP Concepts and Cases"*, 1st edition, ICFAI University, Hyderabad.
5.   **Alex Chow** (2013), *"Getting Started with Dynamics NAV 2013 Application Development"*, 1st edition, Packt Publishing Enterprise, Mumbai.

Cyber Law (Open Book)

Semester II   Hrs.of Instruction /week:4T
20**MBMC15**   No. of credits   :4

Objectives:
1. Provide insights to the law related to the internet and e-commerce.
2. Discuss the legal issues related to intellectual property.
3. Provide knowledge on cyber crimes and related laws.

Unit I   Introduction   12 hrs

Overview of e-commerce and legal implications - Concepts of e-Commerce, ICT Policy statements, Legal implications of ICT .

Unit II   Identification under Cyberspace   12 hrs

Traditional contracts vis-à-vis Cyberspace contracts - Difference under common law, Indian perspective, Identification of parties on the internet, Legal regime of digital signatures and other e-signatures.

Cryptography Technology and digital signature– e–commerce and the property law.

Unit III   Electronic Banking and other cyber crimes   12 hrs

Magnitude of e-Banking in India - Impact of Digital technology on methods of payments, Legal barriers on e- Banking, **Rights of consumers online***, Laws in a comparative perspective, Cyberspace taxation system.

Unit IV   Cybercrime under e- Commerce   12 hrs

Cybercrimes - Cyber financial crimes, Legal challenges, Electronic documents vis-à-vis the Best evidence Rule.

Unit V   Technology and Intellectual property rights   12 hrs

Impact of digital technology and e-commerce on intellectual property rights – Digital Infringement on copyrighted works, Intellectual property rights and electronic publishing,   Development of law of Confidence**, Relevance to Intellectual property rights.***
(*-Self Study Portion).

Course outcomes:
On the completion of the course students will be able to
1. Understand the legal intricacies of IT firms and ITES organizations
2. Logically infer cyber crimes and legal protections
3. Infer legal regime of cyberspace, electronic banking and eCommerce
4. Identify areas where Cybersecurity has to be enforced by law

 Textbook
1. **Falgon Rathod (2014)**, "*Handbook of Cyber Crime and Law in India", ,* Universal law publishers.

References
1. **Gerald R. Ferrera, Robert C. Bird, Margo E. K. Reder, Jonathan J. Darrow, Stephen D. Lichtenstein, Jeffrey M Aresty, Jacqueline Klosek** , (2013) "*Cyber Law : Text and Cases'*, 3rd edition , South Western college Publishers.
2. *Vivek Sood* (2001), "*Cyber Law Simplified"*, 1st edition, Tata McGraw Hill Publishing Company, New Delhi.

Mini Project

Students need to do a group project related to their domain areas. The components of for continuous evaluation would be as follow:

- 2 presentations
- Attendance and Execution of the project
- Report preparation
- Viva Voce

Semester III   Hrs.of Instruction /week:4T
20**MBMC17**   No. of credits   :3

Objectives:

1)   Inculcate knowledge on the methods and models for strategy formulation and implementation.
2)   Provide insights on corporate governance.
3)   Develop competencies to analyze business environments and formulate strategies,

Unit I   Fundamentals   12 hrs.

Business Policy: Definition, Scope, Strategy, Strategic Management.
Strategic Intent: Concept of Stretch, Leverage, Fit, Vision, Mission, Business Definition, Business Model, Goals and Objectives, **Business Models and Strategy for Indian Firms.***

Unit II   Environmental Analysis   12 hrs.

External Analysis : Remote and Operating Environment Analysis, - Components, Structural Analysis, Business Environment Competitive Analysis, Strategic Group Analysis, Portfolio Analysis.

Industry analysis : Five Forces, Coyn and Subramanian Model, Lifecycle Analysis.

Internal Analysis : Dynamics, Organisational Capability Factors, Distinctive Competencies, Resources and Competitive Advantage, Portfolio Analysis, Value Chain Analysis, Analysing Competitive Advantage and Profitability, Resource Audit, Balanced Score Card.

Culture and stakeholder expectation: Cultural Context of Strategy, Stakeholder Mapping, Methods of Assessing Power.

Industrywise business environment and its impact on organisations.*

Unit III   Strategic Alternatives and Evaluation   12 hrs.

Business Level Strategy: Competitive Positions and Business Model, Generic Business Level Strategies, Business Level Strategies Based on Industry Environment, Strategy in Global Environment, Strategy in High Tech Industry.

Corporate Level Strategy : Grand Strategies and its Implication, Strategic Analysis at Corporate Level-BCG,GE model, Grand strategy selection matrix, **Behavioural considerations*.**

Functional Level Strategies : Superior efficiency, Superior quality, Superior innovation, Superior response to the customers.

Unit IV   Strategy Implementation and Control   12 hrs.

Institutionalization: Structure, Leadership and culture, Resource planning– resource plans, Critical success factors and key tasks, Planning priorities, Testing key assumptions, Financial planning and budgeting.

Strategic Control : Control Process, Definition, Strategic Control, Role of information in Strategic Control, Managing strategic change, Understanding processes of strategic change, Diagnosing strategic change needs, Managing the strategic change process, **Leadership and change agency.***

Unit V   Corporate Governance   12 hrs.

Concepts: Stakeholders and Corporate performance, 4p's , Principles, Issues.
Theories : Agency Theory, Theory of Appropriation, Capital Theory, Perfect Capital market Theorem, Fisher separation theorem**.**

Governance mechanism: Internal and External mechanisms, External labour market, performance monitoring, incentive mechanisms**, Business Ethics - Code of corporate governance and ethical issues.***

(* -Self Study Portion)

Course outcomes:
On the completion of the course students will be able to

1. Describe the practical and integrative model of strategic management process that defines basic activities in strategic management
2. Demonstrate the knowledge and abilities to analyze the competitive situation and strategic dilemma and formulate strategies and strategic plans
3. Exhibit an advanced understanding of the role of the board of directors , relationship between the management and the objectives of the relevant stakeholders in shaping the strategy
4. Critically apply corporate governance theories and frameworks to the various corporate governance structures found in their national environments
5. Demonstrate a critical appreciation of the growing importance of corporate responsibility, corporate governance regulations and code and how it relates to corporate strategy**.**

Text Books
1. **Pearce II, John, Robinson Richard B, Amita Mitta**.*(2012), "'Strategic Management– Strategic Formulation and Implementation"*, 12th edition, Tata McGraw Hill Publishing Company Ltd, New Delhi
2. **Kazmi, Azar**(2009), "*Strategic Management and Business Policy"*, 3rd edition, Tata McGraw-Hill Publishing Co. Ltd, New Delhi

References

1. **Fred R. David** (2014*), "Strategic Management –Concepts and cases*", 15th edition, Pearson Prentice Inc, U.K
2. **Pearce II, John, Robinson Richard B, Amita M***itta.(2012), "Strategic Management– Strategic Formulation and Implementation"*, 12th edition, Tata McGraw Hill Publishing Company Ltd, New Delhi.
3. **Kim Warren** *(2008), "Strategic Management Dynamics",* 1st edition, John Wiley Publication, USA.
4. **Swami Parthasarathi** (2007), *"Corporate Governance"***,** 1st edition, Biztantra publication, New Delhi.
5. **Charles W.L. Hill, Gareth R. Jones** (2013), "*Strategic Management- An integrated approach",* 10th edition, Cengage Learning, Canada.

Entrepreneurial Development and Indian Ethics

Semester III   **Hrs.of Instruction /week:3T+1P**
20**MBMC18**   **No. of credits   :3**

Objectives:
 The Objectives are to
1. Highlight the need and growth of entrepreneurship
2. Train in the development of business plans and institutionalization of business.
3. Expose the various assistance from financial Institutions and Government.

Unit I Introduction   12 Hrs.
Entrepreneurship : Concepts, Functions, Types, Factors Affecting Growth- Economic and Non Economic Factors, Entrepreneurial Motivation- Theories, Factors and Behavior, Entrepreneurial Competencies and Development Programs- Phases, Evaluation and Problems, Special Entrepreneurship Types - Women, Rural, Tourism, Social and Global Entrepreneurship, Family Business-Types, Challenges, **Problems and Challenges of Entrepreneurs***

Indian Ethos: History & Relevance, Principles Practiced by Indian Companies, Role of Indian Ethos in Managerial Practices.
Management Lessons: Vedas, Mahabharata, Bible, Quran, Kautilya's Arthashastra, Indian Heritage in Business, Management-Production and Consumption.

Unit II Start Ups   12   Hrs.
Launching New Ventures: Idea Generation, Developing and Testing, New Business ideas- Analyzing environmental dynamics and change, Business Models and Industry Trends, Identifying and Selling to Appropriate Markets, Marshalling the Information Resources, Developing Teams and Alliances.

Business Plan: Content, Significance, Formulation and Guidelines, Business Plan: Design, Development and Templates, **Business Story and Specimen Plans***,

Project Appraisals: Concept, Methods of Appraisal, Environmental Issues, Legal Form and Intellectual Property

Practical: Designing, Trading and Selling a Product or Services, Counselling Sessions *

Unit III   Business Structure and Operations   12 Hrs.

Forms of Business: Business Ownership Patterns, Micro and Small Enterprises.

Financing of Enterprise: Sources and Capital Structure, Securing Seed and Series of Financing, Venture Capital Financing, **Support Systems of Government***, Feasibility Study of a Venture.

Developing Teams and Alliance: People Management, Hiring People, Building Teams, Building Startup Culture, Strategic Alliances - Types, Process, Negotiations and Partnerships.

Unit IV Incorporation   12   Hrs.
Registration of start ups: Direct Identification Number, Digitial Signature Certificate, Company Name Reservation, Memordrum and Articles of Association, Stamping Company Documents, Signed Memordrum and Articles, Certificate of Incorporation and Seal, Permanent Account Number from UTI or NSDL, Tax Account Number, Register For VAT, Employee Provident Fund Organization, ESIC, Filing for Approval From RBI/ FIPB, **Government Approvals***, Environmental Clearance.

Unit V   Business Ethics   **12 hrs.**

Business Ethics: Ethics v/s Ethos , Indian v/s Western Management, Work Ethos and Values for Indian Managers.

Value Based Management in Global Change: Impact of Values on Stakeholders, Trans-Cultural Human Values, Secular v/s Spiritual Values , Value System in Work Culture, Stress Management-Meditation for mental health, Yoga.

Indian Systems of Learning*: Gurukul System of Learning , Karma - importance of Karma to Managers - Nishkama Karma, Laws of Karma, Law of Creation, Law of Humility, Law of Growth, Law of Responsibility, Law of Connection, Corporate Karma Leadership.

<u>Understanding the need for ethics, Ethical values, myths and ambiguity, ethical codes, Ethical Principles in Business</u>[*]

Course outcomes:
On the completion of the course students will be able to
   1. Realize the importance of entrepreneurship as a tool for growth and development, the basic principles of entrepreneurship, the concept and basic principles of innovation.
   2. Identify various Entrepreneurship Development Programs Schemes suitable for startups and other ventures
   3. Portray and discriminate the typologies of entrepreneurship, the financial sources for startups, the modes of business networking -Design business plans for various ventures
   4. Connect Legal and Regulatory environment to manage - Legal liabilities and obligations of the proposed Business Organization .
   5. Adopt Indian ethics to effectively manage business enterprises .

Text Books
   1. **Kanka S.** (2012**), '*Entrepreneurial Development***',** 4th edition, S.Chand & Company Pvt. Ltd, New Delhi.
   2. **Vasant Desai** (2009), '*Dynamics Of Entrepreneurial Development and Management*', 5th edition, Himalaya Publishing House, Mumbai.

References
   1. **Aswathappa**, (2009) '*Essentials of Business Environment*', 12th edition, Himalaya Publishing House, New Delhi,
   2. **Dale Meyer. G & Kurt A Heppard**,(2000), *'Entrepreneurship as Strategy Competing on the Entrepreneurial edge'*, 1st edition, Sage Publications.
   3. **Mathew J.Manimala**, (2005), '*Entrepreneurship Theory at the Crossroads: Paradigms and Praxis*' 2nd edition, Wiley India.
   4. **Poornima M Charantimath** (2007). '*Entrepreneurship Development Small business enterprises*', 4th edition, Pearson Education, India
   5. **Thomas W. Zimmerer, Norman M. Scarborough** (2007), '*Essentials of Entrepreneurship and small business management*', 5th edition, Pearson Prentice Hall, New Jersey

<p align="center">**Applied Operations Research**</p>

Semester III   **Hrs.of Instruction /week:3T+1P**
20**MBMC19**   **No. of credits**   **:3**

Objectives

1. Provides insights into operations research techniques
2. Develop competences in application operation research techniques for decision making.
3. Apply of operation research for managerial problems.

Unit I   Introduction   **12 hrs.**

Concepts: Genesis, Application, Scope, limitations.
Linear programming: Concepts , Formulation of models , Graphical Explanation of Solutions , simplex algorithm , Use of slack, Surplus and artificial variables , Interpretation of optional tableau unique optimum, Multiple optimum, **unboundedness and infeasibility***. Duality – Dual simplex method.

Unit II   Transportation Problem   **12 hrs.**

Transportation Problem: Solution procedures for initial feasible solutions, Optimality check , balanced / Unbalanced, Minimization / Maximization, Prohibited routing , Problems.
Assignment Problem: Concepts, Formulation of model, Hungarian method of solution, Maximization /Minimization, Balanced / Unbalanced, **Prohibited assignments***, Problems.

Unit III   Network Analysis   **12 hrs.**

Project planning and control: Concepts, Arrow diagrams , Time analysis and derivation of the critical path, Concepts of a slack / float, Crashing of CPM Network , Probability assessment in PERT network. Use of PERT/CPM,
Decision Theory: Concepts , Decision making under conditions of uncertainty and condition of risk, **Expected value of perfect information***, Decision tree analysis.

Unit IV   Replacement Theory   **12 hrs.**

Replacement Theory: Replacement of items subject to deterioration, Subject to random total failure, **group vs. individual replacement***.
Queuing Theory: Concepts, Basic characteristics of a queuing system, Kendall's notation , Problems based on M/M/1 and M/M/C models.

Unit V   Simulation and Dynamic Programing   **12 hrs.**

Simulation: Areas of application, Random numbers, Monte Carlo Simulation, Simple Applications.

Dynamic Programming: Concept and Applications - Applications of the Operational Research techniques to IT organisations, **case studies*.**
(* - Self Study Portion)

Course outcomes:

On the completion of the course students will be able to

1. Identify and develop operational research models from the verbal description of the real system. Further students would understand and apply the mathematical tools that are needed to solve optimization problems.

2. Demonstrate insight with respect to solution techniques namely transportation and assignment for resource and facility allocation.
3. Develop mathematical skills to analyze and solve network models arising from a wide range of applications. Students will be equipped to determine critical path analysis to solve real life project scheduling time and timely delivery. Further the students would be able to identify right solutions strategic situations for decision making routing through decision tree.
4. Model a dynamic system as a queuing model and compute important performance measures.
5. Simulate the business scenario using random numbers for model building and decision making and also to model and solve problems using dynamic programming

Text Books
1. **Gupta, M.P. and Sharma, J.K.** (2006), *"Operations Research for Management"*, 7th edition, Macmillan, New Delhi.
2. **Sharma, .J.K**. (2006), "*Operations Research, Theory and Applications"*, 7th edition, Macmillan, New Delhi.

References
1. **Kapoor, V.K.** (2010), *"Operations Research"*, 11th edition , Sultan Chand & Sons, New Delhi.
2. **Mathur K & Solow D** (2006), "*Management Science"*, 7th edition, Prentice Hall Inc., Englewood Cliffs, New Jersey.
3. **Narang, A.S.** (2007), *"Linear Programming and Decision Making"*, 1st edition, Sultan Chand & Sons, New Delhi.
4. **Sharma, J.K**. (2001), "*Fundamentals of Operations Research"*, 7th edition, Macmillan New Delhi.
5. **Srinath, L.S.** (2004)**,** *"Operations Research for Executives"*, 6th edition, Affiliated East West Press, New Delhi.
6. **Taha Harndy, A.** (2008), **"Operations Research – An Introduction"**, 8th edition, Macmillan, India, New Delhi.

<div align="center">**e-Customer Relationship Management**</div>

Semester III	**Hrs.of Instruction /week:2T+2P**
20**MBMC20M**	**No. of credits :3**

Objectives:
1. Provide an overview of e-CRM, models and business processes.
2. Elaborate details and technologies to implement an e-CRM web sites.
3. Discuss the integrated marketing communications for e-CRM
4. Imbibe skills to design and implement CRM software modules.

Unit I   CRM   12 hrs.
Whole Brained CRM: Evolution, CRM perspectives - Customer Life Cycle, Information Technology, Business Strategy, Customer Life Cycle Model.
Relationship Marketing: Concepts- Trust, Commitment, Mutual Connection, Relational Proness , Relational Bonds, Relationship marketing Programs and Strategies.
Consumer Experience: Consumer Resources, Experience Domains, Consumer Experience Modelling
Case study :CRM strategies of Dabur, Amul*

Unit II   Customer Profitability Analysis   12 hrs.
Curstomer Profitbailty: Meaning, Customer Lifetime Value, Customer focus, Shareholder Value Service Profit Chain Balance Score Car and Value Proposition.
Customer Probability Analysis: Customer Perspective Core Measures, Customer Value Proposition, Sears Model, Customer Profitability System, Activity Cost Drivers,
Improving Customer Profitability: Measurement,   Management, Information Technology Applications
Designing value proportions and profitability analysis for an imaginary product .

Unit III e-CRM Business Process   12 hrs.
Business Models for e-CRM: Knowledge Enabled Customer Relationship Management, Demand Chain Management.
e-CRM Business Process: Business Process Models and CRM, Pre-order Customer Support Issues, Point of Order Customer Support Issues, Post Order Customer Support Issues. Featuring successful e-CRM websites*.
Designing model CRM sites using PHP, Blender and Drupal*.

Unit IV   e-CRM Technology   12 hrs.
e-CRM technology: Web-Hub Strategies, Web Architecture for Enterprise Applications, Web Services, Applications and Architecture Platforms, Internet Client/Server Applications.
e-Security: Security on the Net, e-business Risk Management issues,
Digital e-Payment Systems: Classification, Digital Payment Requirement,Properties of e-Cash, Cheque Payment System on the Internet, Risk and the E-Payment Systems, Designing E-Payment System
Analysis and integration of e-payment schemes to a eCRM webpage *.

Unit V   Building and Implementing e-CRM   12 hrs.
e-CRM software – Modules, Integrations, Technology Support and Issues, Inbuilt Analytics and application .
 Roadmap for Implementation - Phases, Steps, Tasks, Aligning Technology, Barriers to CRM Actualization*,
Analysis of successful CRM Software and strategic reporting
(*-Self Study and Practical Portion)

Course outcomes:

On the completion of the course students will be able to

1. Critically review and interpret the theoretical aspects of CRM across the main areas of sales, services and marketing.
2. Evaluate CRM technology and CRM implementation strategies.
3. Critically analyze the application of knowledge enabled CRM and its integration with demand management
4. Investigate, analyse, demonstrate CRM software
5. Implement and customize CRM in a work-related environment.
6. Design customer relationship process and strategies for e-retailers.

Text books

1. **John W. Gosney and Thomas P. Boehm** (2000), "*Customer Relationship Management Essentials*", 1st edition, Prima Tech, US.
2. **Jill Dyche** (2002*), "The CRM Handbook: A Business Guide to Customer Relationship Management"* , 4th edition, Addison Wesley Information Technology Series, US.

References

1. **David Kosiur** (1997), "*Understanding Electronic Commerce*",1st edition, Microsoft Press, US.
2. **Murthy.C.S.V.Murthy** (2016), "*e-Commerce, Concepts, Models and Strategies*", 1st edition, Himalaya Publishing House, Mumbai.
3. **Dave Chaffey** (2008), "*E-Business and E-Commerce Management Strategy, Implementation and Practice*", 3rd edition, Pearson Education, US.
4. **Faculty of Finance & Management** (2002*), 'Customer Profitability Analysis',* 1st edition, The Institute of Charterted Accountants (England & Wales)

<h1 style="text-align:center">Investment and Security Analysis</h1>

Semester III   **Hrs.of Instruction /week:2T+2P**
20MBMC20F   **No. of credits   :3**

Objectives:
1. Orient on rational investment decision making.
2. Impart knowledge on the theory and practice of security analysis.
3. Provide in-depth knowledge of derivatives and commodities market.

Unit I   Introduction   12 hrs

Investment - Meaning, Objectives, **Avenues*,** Process.

Financial Systems, Markets and Instruments : Structure of Indian Financial System, Primary Market - Listing of Securities, Secondary Market – Stock Exchanges, SEBI, **Money Market and Capital Market Instruments,** Mutual Funds.

Risk and Return: Concept, Relationship between risk and return, Computation, Risk – Types, Risk measurement, Beta Calculation.

Unit II   Fundamental and Technical Analysis   12 hrs

Fundamental Analysis: Economy, Industry, Company Analysis – Intrinsic value.

Technical Analysis: Assumptions, Market Indicators, Dow Theory, Price indicators - Support and Resistance levels, Volume Indicators – Advance Decline Index, Oscillators – Moving Averages, MACD, RSI, ROC, Types of Charts, Price Patterns.

Efficient Market Hypothesis : Random Walk Theory, Forms of EMH, **Market Inefficiencies*.**

Unit III   Portfolio Analysis, Selection, Evaluation   12 hrs

Portfolio Analysis: Portfolio – Concept, Risk, Return, Diversification, Markowitz Model – Efficient Frontier, Efficient Portfolios.

Capital Market Theory: CAPM theory – Assumptions, Model, CML, SML, Sharpe Model, **Arbitrage Pricing Theory – Assumptions, Model*.**

Portfolio Evaluation : Portfolio Investment process, Performance evaluation – Sharpe, Treynor, Jensen Index .

Unit IV   Financial Innovations and Commodities   12 hrs

Derivatives: Meaning, Options, Futures – Stock and Index futures and options, SWAPS, Convertible Securities, **Warrants*.**

Commodity Market: Commodity Futures and Options, Hedging using commodity futures.

Unit V   International Investment and Behavioural Finance   12 hrs

International Portfolio Investments: Investment avenues in foreign markets* , Foreign portfolio investment .

Behavioral Finance: Meaning, Psychological influences in investment decisions
(*- Self Study Portion).

Course outcomes:

On the completion of the course students will be able to

1. Understand Indian and international investment environment along with its avenues and dynamics.
2. Apply various tools and techniques for analyzing and predicting stock prices.
3. Construct and manage portfolio of financial assets.
4. Develop understanding of derivative instruments and commodities market
5. Identify the psychological issues in investment decision making

Text Books

1. **Chandra Prasanna** (2012), *"Investment Analysis and Portfolio Management"*, 4th edition, Tata McGraw Hill Publishing House, New Delhi.

References

1. **Bhalla, V.K.** (2011), *"Investment Management, Security Analysis and Portfolio Management"*, 17th edition, Sultan Chand, New Delhi.
2. **Fischer Donald, E., Jordan Ronald J.** (2008), *"Security Analysis and Portfolio Management"*, 6th edition, Prentice Hall of India, New Delhi.
3. **Gupta. S.L.** (2008), *"Financial Derivatives, Theory, concepts and Problems"*, 1st edition, Prentice Hall Of India Private Limited, New Delhi.
4. **John Hull** (2015), *"Option, Futures and Other Derivatives "*, 9th edition, Pearson Publications, New Delhi.

Organisational Dynamics and Development

Semester III   **Hrs.of Instruction /week:2T+2P**
20MBMC20H   **No. of credits   :3**

Objectives:
1. Provide theoretical and strategic focus to organizational dynamics.
2. Incorporate dynamic processes such as decision-making, power, politics, organisation communication and conflict management and its implications on change management.

Unit I   Organisational Change and Stress Management   12 hrs.

Organizational change: Forces, Planned change, Role of change agents, Resistance to change, Approaches, **Contemporary issues*.**
Work stress: Meaning of Stress, Consequences, Potential sources of stress, Stress Management Techniques.

Unit II   Organisation Power and Politics   12 hrs.

Organization power: Power vs. Authority, Characteristics, Sources , Dynamics of power , Bases of power, Power tactics, Politics, Dimensions, Factors contributing to potential behaviour, **Impression management – techniques,**
Organizational conflict: Definition, Conflict process, Conflict leading intentions, Conflict management techniques.

Unit III   Organisational Culture and Climate   12 hrs.

Organizational culture: Definition, kinds, Impact on behaviour, Creating and sustaining culture**.**
Organizational climate: Meaning, **Factors influencing climate***, Organisation Climate Models.

Unit IV   Organizational Development   12 hrs.

Organizational Development: Meaning, characteristics , process , Models.
Interventions: Comprehensive intervening, **sensitivity training**,* , Process consultation, MBO, TA, Grid training**,** Stream analysis, Organization mirroring , Team interventions.

Unit V   Organisational Effectiveness   12 hrs.

Organisational Effectiveness: Excellence in Organizational Effectiveness, Perspectives, Approaches - Local attainment, Strategic constituencies , Behavioural , **Time Dimension And OE***
(*- Self Study Portion).

Course outcomes:

On the completion of the course students will be able to
1. Understand the nature of organizational change and work stress within the context and organisational perspective.
2. Critically examine the power and politics and conflict management techniques adopted in the organisation
3. Describe the Organisation culture, norms and behaviours
4. Apply the principles of OD and know how design and development, work together for organisational strength and the importance of the intervention techniques in implementation of design and development.
5. Look at what employees, organizations and practitioners needs from OD in today's world

Text books:

1. **Stephen P. Robbins** (2010), "*Organisational Behaviour*", 10th edition, PHI India Pvt Ltd., New Delhi

References:

1. **Wendell L.French, Cecil H Bell** (2002), *"Organisational Development"*, 6th edition, PHI India Pvt Ltd, New Delhi.
2. **French, Wendell and Cecil Bell** (2002), *"Organisation Development"*, 2nd edition, Prentice Hall, New Delhi.
3. **Madhurendre K. Varma** (2000), *"Nurturing change through your Human Assets optimizing Organisational Challenger in the New Millennium"*, 2nd edition, Sage Publications, New Delhi.
4. **Neal M. Ashkanasy, Celeste P.M. Wilderom Mark F. Peterson** (2000), *"Handbook of Organisational Culture and Climate"*, 3rd edition, Sage Publications, New Delhi.
5. **Kavita Singh** (2009), *"Organisation change and Development"*, 2nd edition, Excel Books, New Delhi.
6. **Tidd** (2008), *"Managing Innovation: Integrating Technological, Market and Organi-sational Change"*, 6th edition, Wiley India Pvt Ltd, New Delhi.

Quality Management

Semester III   **Hrs.of Instruction /week:2T+2P**
20**MBMC20O**   **No. of credits   :3**

Objectives
1. Familiarize on quality management aspects and its application in manufacturing and services.
2. Inculcate in-depth ideas on different methodologies, tools and techniques proposed for product and process improvement.
3. Create awareness on opportunities for product/service or process improvement based on quality management principals.

Unit I   Introduction to Quality Management   10 hrs
Quality Management: Evolution, Concepts of Product and Service Quality, Dimensions of Quality, Deming's, Juran's, Crosby's Quality Philosophy, Quality Cost, **Strategic quality management*** ,**Quality Related priorities of Indian companies***, Case studies.

Unit II   Process Quality Improvement   14 hrs
Process Quality: Concept,   Graphical and statistical techniques for Process Quality Improvement, Graphical tools for data representation, 7 QC tools, Sampling, Sampling Distribution, and Hypothesis Testing, Regression, Control Charts, Process Capability Analysis, Measurement System Analysis, Analysis of Variance (ANOVA), Design and Analysis of Experiment (DOE), Acceptance Sampling plan**,** Vendor Ratings, **Bureau of Indian Standards, Agmark, Grading and standardization, Quality council of India*.**

Unit III   Process Quality control and Management   14 hrs
Quality Control: TQM, Leadership, Lean and JIT Quality Philosophy, Benchmarking, Process failure mode and effect analysis (PFMEA), Service Quality, Six sigma for Process Improvement, ISO 9001 and QS 9000, Quality Audit, Quality Circles, **Customer Operations Performance Centre (COPC) 2000*.**

Unit IV   Product Quality Improvement   12 hrs
Product quality: Quality Function Deployment, Robust Design and Taguchi Method, Design Failure Mode & Effect Analysis, Product Reliability Analysis, Six Sigma in Product Development, **Total Productive Maintenance*.**

Unit V   Intellectual Properties System   10 hrs
Intellectual Property: Definition, **Importance of IPR***, TRIPS and its Implications, Patent, Copyright, Industrial Design and Trademark,
(*- Self Study Portion).

Course outcomes:
On the completion of the course students will be able to
1. Understand and evaluate the principles of quality management and to explain how these principles can be applied within quality management systems.
2. Select and apply appropriate techniques in identifying customer needs, as well as the quality impact that will be used as inputs in TQM methodologies.
3. Evaluate the cost of poor quality and process effectiveness and efficiency to track performance quality and to identify areas for improvement.
4. Choose a framework to evaluate the performance excellence of an organization, and determine the set of performance indicators that will align people with the objectives of the organization.
5. Able to analyze the effects of intellectual property rights on individuals, firm and society as a whole.

Text Books
1. **Dale H.Besterfield, Carol Besterfield, Michna, Glen H. Besterfield, Mary Besterfield – Sacre, Hermant-Urdhwareshe, Rashmi Urdhwareshe**,(2011),'**Total Quality Management'**, Revised 3rd edition, Pearson Education.

References
1. **D. C. Montgomery** (2010), '*Introduction to Statistical Quality Control'*, 3rd edition, John Wiley & Sons.
2. **Mitra A** (1998), '*Fundamentals of Quality Control and Improvement'*, 2nd edition, PHI
3. **J Evans and W Linsay (2011)**, '*The Management and Control of Quality'*, 8th edition, Thomson
4. **D.C.Montgomery** (2005), `*Design and Analysis of Experiments'*, 6th edition, John Wiley& Sons,
5. **D. C. Montgomery and G C Runger** (2012), '*Applied Statistics and Probability for Engineers'*, 3rd edition, John Wiley & Sons.

Retail Brand Management

Semester II   **Hrs. of Instruction/week: 2T+2 P**
20**MBAC20R**   **No. of Credits   : 3**

Objective:
1. Provide insight on the consumer-centric approach to building, measuring and evaluating strategies that build retail brand equity..
2. Elaborate on important issues related to planning and implementing retail brand strategies for a diverse group of marketing offerings
3. Learn how to identify retail brand meaning and to measure retail brand strength for any particular market offering.

Unit I   Introduction   **12 hrs.**
Brands: Definitions, Branding Concepts , Functions , Significance of Brands, Different Types of Brands, Co branding .
Store brands: Understanding Shoppers, Delivering value through retail formats, Deciding location.
Retail branding: Meaning, Branding strategies, retail policies, relational bonds and customer centric branding. **Global Branding strategies***

Unit II Retail Brand Management
12 hrs.
Retail Brand Management process: Consumer Retail Brand Knowledge, Retail Brand Identity, personality and Associations, Retail Brand Architecture.
Strategic Retail branding : Retail Brand vision, Designing Retail Brand Elements, Retail Brand positioning, Establishing Retail Brand values, Retail Branding for Global Markets, Competing with foreign brand, **Tactical Branding Decisions***.

Unit III Retail Brand Building And Extension   **12 hrs.**
Retail brand building: principles, segmentation, excellence in brand management: brand diamond, brand purchase and funnel, brand matrix, brand promise , brand delivery.
Store brand portfolio management : multiple formats and brands, brandmatics advanced, brand space mapping impact estimation.
Private label branding: growth*, strategies, SKU selection, capabilities.
Retail brand extension: Retail Brand Adoption Practices, Factors influencing Decision, Re-branding and re-launching, Test Marketing and alternative methodologies, Prelaunch and launch management.

Unit IV Retail Brand Communications   **12 hrs.**
Retail Brand image: brand building process, Retail Brand Loyalty programmes, **Retail Brand Promotion Methods***. Brand Differentiation, On line Retail Brand Promotions.

Unit V Retail Brand Performance   **12 hrs.**
Retail Brand Equity Management: perspectives of band equity, metrics to measure retailer equity, Brand Audit, Retail Brand Equity Measurement, **Retail Brand Leverage***.
(*-Self Study Portion)

Course Outcomes

On the completion of the course students will be able to:

1. Demonstrate knowledge of the nature and processes of retail branding and retail brand management.
2. Explain retail branding concepts and ideas in their own words.
3. Appraise the key issues in managing a brand portfolio and making strategic brand decisions.
4. Understand and conduct the measurement of retail brand equity and retail brand performance
5. Practically develop a retail brand, including positioning and communication.
6. Prepare a professional, logical and coherent report in the form of a retail brand audit.

Text Books

1. **De Gruyter Oldenboug,** (2018), *"Strategic Retail Management and Brand Management"*, **1st Edition,** Walter de Gruyter, Boston, USA.
2. **Kevin Lane Keller** (2007), *"Strategic Brand Management: Building, Measuring and Managing",* 3rd Edition, Prentice Hall, New Delhi.

References

1. **U.C.Mathur** (2007), *"Product and Brand Mangement"*, first edition, Excel Books, New Delhi.
2. **Harsh V Verma** (2008), *"Brand Management"*, Second edition, Excel Books, New Delhi.
3. **U.C. Mathur** (2010), *"Retail Management"* Text and Cases, I.K Publishing House Pvt.Ltd., New Delhi.

<h1 style="text-align:center">Family Business Management</h1>

Semester III   **Hrs.of Instruction/week : 4T**
20**MBMC20E**   **No. of credits: 3**

Course objectives:
1. Develop suitable strategies to assist family -owned business and integrate the vision towards new horizon.
2. Augment skills to capitalize dynamic business environment to create new venture opportunities
3. Understand the specific issues in family business management and professionalise the various functions involved.

Unit 1 Entrepreneurship and Family Business   **12 hrs**
Family business: Uniqueness of family business, Importance, challenges, Advantage and disadvantages, key elements of entrepreneurship in relation to family business organizations.
Family business management: Family business models in India, Life cycles of Family Business, **Nature of Indian Family business.**

Unit 2 Managing Family Business   **12 hrs**
Family Business management : Strategic vision & building teamwork, Professional Management of the Family business firm – Models, Managing succession and long term continuity.

Family Business and Leadership: leadership challenge, Types of leadership: founder-ownership, pyramidal groups, vertical ownership, Contemporary Approaches to Leadership: Joint Hindu Family Business, Leadership Qualities of Karta
Succession paln : Model of Succession in Family Business and Valuation of family business firms.
Role of non -family members and family in different stages of Business.

Unit 3 Excellence in Family Business   **12 hrs**
Corporate Governance Vs. Family Governance : , policies and processes of developing and practicing corporate and family governance, Estate and tax planning, Wealth Management concerns, Fund sourcing, Social cost-benefit analysis of the entrepreneurial family firm, **Family firm advantages**, Family councils and constitution, Healthy Business practices, Portfolio management in family- run business.

Unit 4 Future of Family Business   **12 hrs**
Innovation and Creativity: Adaptation to changes, family dynamics and changing family culture, Developing innovative ideas and business models, Nature of entrepreneurs in next generation, Balancing Family and Family Business.
Business Advancement: Alliances, Partners, Competition or Collaboration:-**Strategic Alliances in Global Markets**, Business Plan Prepositions, Evaluating and Selecting the Right Partners for International Engagement, International strategies for sustainability.

Unit 5 Great Families in Business   **12 hrs**
Best practices: Continuing the entrepreneurial spirit – challenges - **Characteristics of successful business families**, Successful Indian Families in Business.
Family Business Abroad- Lessons from US and China
(*-Self Study Portion)

Course Outcomes:

After completion of the course, the students will be able to-

1. Identify the challenges in family-owned business and formulate strategies to improve overall performance.
2. Evaluate the opportunities to enhance the business performance leveraging family strengths.
3. Enhance the entrepreneurial skills set needed to manage the family business successfully.
4. Design next-gen corporate strategies to increase the profitability position of the family business.
5. Apply different models to suit the international business environment and expand family business globally.

Text Books

1. **Kakani R K**(2015), '*Financial Performance and Corporate Strategy of Indian Business Groups'*, Lambert Academic Publishing.
2. **Peter Leach, Tatwamasi Dixit** (2015), '*Indian Family Business'*, Rupa Publications, New Delhi.

References

1. **Arora, R. and Sood, S.K** (2015). '*Fundamentals of Entrepreneurship and Small Business Management'*, Kalyani Publishers, Ludhiana.
2. **Bhushan YK** (2015), '*Fundamentals of Business Organization& Management'*, Sultan Chand & Sons, New Delhi.
3. **Chandra, P** (2014). '*Project Preparation-Appraisal and Implementation'*, Tata McGraw Hill, New Delhi.
4. **Desai, Vasant** (2015), '*Small-Scale Industries and Entrepreneurship'*, Himalayan Publishing House, Mumbai
5. **Gupta, C.B & Srinivas N P**(2015), '*Entrepreneurial Development'*, Sultan Chand & Sons, New Delhi
6. **Storey, D & Greene, F.**(2010), '*Small Business and Entrepreneurship'*,Pearson Education, London.

Information Security and Audit Control

Semester III   **Hrs.of Instruction /week:2T+2P**
20**MBMC21S**   **No. of credits   :3**

Objectives:
1. Discuss the implications of trends in information processing and its security.
2. Provide insights on security of physical components and other applications.
3. Design user requirements, quality and security policies for the organization.

Unit I Introduction   **12 hrs.**

Information Security: Critical Characteristics of Information, NSTISSC Security Model, Components of an Information System, Securing the Components, Balancing Security and Access, SDLC , The Security SDLC, **Assessing the Security of Computer systems*.**

Unit II Security Investigation   **12 hrs.**

Security issues   : Business Needs, Threats, Quality Standards, Software Attacks, Cyber Terrorism, IP Spoofing, Network Security Issues, Ethical Hacking.
Standards followed by organisations on information handling*.

Unit III Security Analysis   **12 hrs.**

Risk Management : Identifying and Assessing Risk, Assessing and Controlling Risk, Risk Control Strategies, Access Control Administration, Implementation of Access Controls, Security Administrator, Implementing Kerberos in Distributed Systems.
Access Control Levels and Issues in organisations*.

Unit IV Design   **12 hrs.**

Logical Security and Policy Standards : Blueprint for Security, Information Security Policy, Standards and Practices, ISO 17799/BS 7799, NIST Models, VISA International Security Model, Design of Security Architecture, Planning for Continuity, **COBIT*.**

Application Security - Cryptography, Cryptography Applications and Uses, **Cryptography and Escrowed Encryption*.**

Physical Design -Security Technology, IDS, Internet Firewalls, Scanning and Analysis Tools, Cryptography, Access Control Devices, Access Control Issues, Biometric Identification, Physical Security, **Security and Personnel*.**

Unit V Legal, Ethical and Professional Issues   **12 hrs.**
Law, Investigation, and Ethics - Legal and Regulatory Issues, Computer Abuse Methods and Detection, Federal and State Computer Crime Laws, Investigation, Computer Crime Investigation and Computer Forensics, **Information Ethics, Computer Ethics***, The Self-Hack Audit.
(*-Self Study Portion).

Course outcomes:
On the completion of the course students will be able to
1. Demonstrate knowledge on information security, security model, and security of computer systems
2. Describe the issues in security, threats, software attacks and ethical hacking
3. Understand and Control the risk by implementation of access control
4. Analyze the latest Computer Security Threats, VISA international security model and Cryptography
5. Critically evaluate the security of information systems with legal, ethical and professional issues

Text Books
1. **Michael E Whitman and Herbert J Mattord** (2017), '*Principles of Information Security'*, 4th edition, Cengage Learning, USA.

References
1. **Matt Bishop** (2006), '*Introduction to Computer Security'*, 1st edition, Pearson PHI, India
2. **Thomas R. Peltier** (2004), '*Information Security Policies, Procedures, and Standards: Guidelines for Effective Information Security Management'*, 2nd edition, Auerbach Publications, USA.
3. **Gerald R. Ferrera, Robert C. Bird, Margo E. K. Reder, Jonathan J. Darrow, Stephen D. Lichtenstein, Jeffrey M Aresty, Jacqueline Klosek** (2011), '*Cyber Law : Text and Cases'*, 3rd International edition, Cengage Learning.
4. **Micki Krause, Harold F. Tipton** (2012), '*Information Security Management Handbook'*, 10th edition, Auerbach Publishers, USA.

Semester III   Hrs.of Instruction /week:2T+2P
20MBMC22M   No. of credits   :3

Objectives:

1. Provides insights into the changing logistics environment and the strategic issues in SCM
2. Indicate the factors influencing logistics and supply chain management
3. Design strategies for various modules of logistics and supply chain management

Unit 1   Supply Chain (SC)   12 hrs
Supply Chains: Concept, Integrated Supply Chain Management, Goals and Objectives, Business Environment and Supply Chain Competitiveness, Drivers,Challenges.,
SCM Models: integrated Customer Life Cycle, Demand Chain Management and Supply Chain Model, Supply Chain Models – SCOR , DCOR, CCOR, M4SC
SCM Strategies: Process view, Push and Pull SC Strategies, Push/ Pull boundary
Performance: Performance Measurement and Control Mechanism, Throughput Dollar Days [TDD],Inventory Dollar Days [IDD], Risk Management- Disruptions, Risk Management Strategies

Unit II   SC Planning and Co-ordination   12 hrs
Demand Forecasting and Planning :Forecasting Methods, Aggregate Planning- Steps, Strategies, Methods, Managing Supply and Demand.
Inventory Management: Cycle Inventory, Impact of Economies of Scale on Cycle Inventory, f Quantity Discount on Cycle Inventory, Safety Stock- Uncertainties, Replenishment Policy Safety Stock, Impact of Aggregation, Product Availability - Methods in Determining Product Availability
Co-ordination: Co-ordination, Bullwhip Effect, Mechanisms.

UnitIII   Operational SCM   12 hrs
Facility Decision: Network Design Decision, Impact, Framework,Analytical Methods for Evaluating Locations
Transportation: Role, Principles, Modes, Economies, Strategies for optimization.
Warehousing : Objectives, Types, Strategy
Procurement Management: Strategic Sourcing, Purchase Process, Purchasing in Global Supply Chain,Global Purchasing Trends, Critical Success Factors
Outsourcing Business Model : Make or Buy Decision, Supplier Segmentation Matrix and Outsourcing Strategies
Pricing and Revenue Management: Evaluation of Cash Flow Using NPV, Intra Company Transfers and Transfer Pricing Methods, Transfer Pricing, Cost Savings , Value Added and Non-Value Added Activities in Pricing and Revenue Model , Activity Based Costing, Pricing - Customer Segments, Perishable Goods

Unit IV   Strategic Supply Chains 12 hrs
Manufacturing process Integration: Business Model for Outsourcing, Internal Integration, Enterprise Resource Planning, Matching Functional and Innovative Products with Supply Chain, Integration Of SCM, ERP And CRM- Value Stream Mapping- Application and advantages.
Supply Chain Management Practices: Service Supply Chain, Significance of SERVQUAL in Supply Chain, Mass Customization and Customization Strategies.
Agile, Lean and Green Supply Chain Management: Agile Organizations,Agile Supply Chain Management Practices, Lean Supply Chain Management Practices, Leagile Supply Chain Management, Green Supply Chain - Drivers , Practices, Relationship Model.
Sustainable SC: Triple Bottom Line, External Integration Strategies, Supply Chain Maturity Reference Model

Unit V   Supply Chain Management for e-Commerce and Digital Supply Chains   12 hrs
Supply Chain for e-commerce : Challenges and Solutions, reverse Logistics and Refund Policy, IT and its Role in SCM, Digital Supply Chain.
Supply Chain Analytics: OLAP Operations, Business Analytics for Supply Chain Optimization, Predictive Analytics, Business Analytics- Concepts and Components, Portfolio and Characteristics.
IT enabled Supply Chain Transformation: Fuzzy Logic, Blockchain Technology, IoT Applications.

Course outcomes:

On the completion of the course students will be able to
   1. Understand the responsibilities and interrelationships between stakeholders in supply chain network.
   2. Apply relevant demand forecasting techniques and manage inventory effectively.
   3. Assess various modes of transportation and decide on cost effective modes.
   4. Coordinate and collaborate various processes in supply chain for improving total productivity.
   5. Evaluate implications of supply chain and logistics at local and global perspective.

Text Book
   1. **Sunil Chopra and Peter Meindl,** (2015), **"*Supply Chain Management: Strategy, Planning and Operation"*,** 6th Edition, Pearson Higher Education, New Delhi.
   2. **Robert B. Handfield, Ernest Nichols** (2016), **"*Introduction to Supply Chain Management"*,** 1st Edition, Pearson Education, New Delhi.

References
   1. **Burt, Dobler, Starling** (2008)**, *'World Class Supply Management- The Key to Supply Chain Management'* ,** 1st Edition, Tata McGraw-Hill Publishing Company Ltd, New Delhi.
   2. **Christopher. Martin** *(*2011), "*Logistics and Supply Chain Management"*, 4th Edition, Pearson Education, New Delhi.
   3. **David Simchi, Levi, Philip Kaminsky, Edith Simchi Levi** (2007), "*Designing and Managing the Supply Chain"*, 3rd Edition, McGraw Hill Publications, New Delhi.
   4. **Donal J Bowersox, David J Closs, M Bixby Cooper** (2008)**, "*Supply Chain Logistics Management", 2nd* Edition,** Tata McGraw Hill, New Delhi.
   5. **James R. Stock, Douglas M. Lambert** (2001), "*Strategic Logistics Management",* 4th Edition, McGraw Hill Publications, New York.
   6. **Michael H. Hugos** (2011)**, "*Essentials of Supply Chain Management",** 3rd Edition, Wiley Publications, US.
   7. **Shay**(2004)**, *"Supply Chain Management for Global Competitiveness"*,** 2nd Edition, Macmillan Publishers, New Delhi.

Tax Planning and Management

Objective
- Familiarize the principles, problems and structure of business taxes in Indian.
- Highlight the relevance of taxes in business decisions.
- Broad understanding of role of taxation in economic and industrial development of an economy.

Unit I Taxation Management   **12 hrs**
Introduction : Nature, concept, Objectives , Types of Taxes, Factors to be considered for Tax Planning. Tax Planning, **Objectives of Tax Management***, Tax Evasion and Tax Avoidance. Tax Planning of Specific Categories, Tax Avoidance and Tax Evasion, Assessment Year, Previous Year, Assessee – types, Residential status, Non-resident Indians.

Unit II Income tax and Planning   **12 hrs**
Tax on Individual Income: Computation of tax under the heads of Salaries, Income from House Property, Profits and Gains of Business, Capital Gains and **Income from Other Sources***. Tax deductible at source.

Unit III Tax Planning for Firms, HUFs and AOPs   **12 hrs**
Tax Planning: Partnership firm under Income Tax Law, Tax deductions available to firms, Provisions relating to interest and remuneration paid to partner, Computation of partnership firms' book profit, Set-off and carry-forward of losses of Firms and taxation of HUFs and **Associations of Persons*** (AOPs).

Unit IV Corporate Income Tax and planning   **12 hrs**
Corporate Income Tax : Tax concessions and incentives for corporate decisions, Tax planning for depreciation; Treatment of losses and unabsorbed items; Carry forward and set off losses.
Tax and business reorganizations: Merger and Amalgamation, Tax planning regarding Employees Remuneration, **Tax appeals***, Revision and Review.

Tax planning with reference to setting up of a new business: Locational aspect, **Nature of business***, form of organization, Tax planning with reference specific Managerial Decisions-Purchase of asset out of Own fund Vs Borrowed fund, own or lease, Hire purchase Vs Instalment, Make or Buy decision, Repair or Replacement - problems.

Unit V Special Tax Provisions, Service tax, GST and VAT   **12 hrs**
Special taxes: Tax provisions relating to Free Trade Zones, Tax Incentives for Exporters: Special provisions relating to non-residents, Doubt Taxation Avoidance Agreement.

Applicability and services covered: Valuation of taxable services for service tax; Payment of service tax; Registration; Furnishing of return; Maintenance of record; Other obligations.

Computation of Tax on specific services: Advertising agency services, Banking and Financial Services- CAs/CMAs/Cs Services- Construction/Works contract, Educational Services including coaching classes, Telecom related services and Software related services, Transport of Goods and Transport of Passengers services, Manpower supply services, Tour Operator services, Stock Broking Services, **Courier services***.

VAT: Basic concept, How VAT Operates, **Merits& Demerits*,** a brief overview of sate level VAT in India.

Goods and Service Tax (GST): Concept and Developments- Basic Concepts of Goods and Services Tax, various types of supply, including exempt supplies, GST on imports, Handling Input GST, Registration for GST, Blocked input GST, Fringe benefits, Import benefits, Exports of goods, International Services, Administration of GST, Objections and appeals.

**Hands on experience - Software package-Introduction of Quick Books
(*-Self Study Portion).**

Course outcomes:
On the completion of the course students will be able to
1. Familiarize the basic concept of Direct and Indirect Taxes
2. Acquaint the different know-how and heads of income with its components and calculate the taxable income and tax to be paid
3. Describe the transaction types which are related to VAT, its application, VAT compliance and VAT liability
4. Identify tax planning opportunities and recommend appropriate tax-saving strategies for decision making
5. Tackle tax situations for a variety of taxpayers, such as wage earners, salespersons, proprietors of small business, professionals, investors, home and rental property owners, farmers, etc.,

Textbooks
1. **Dr.R.K.Jain** (2016), Income Tax planning and Management, 10th edition, SBPD Publications, Agra.
2. **Kaushal Kumar Agarwal** (2016), Direct Tax Planning and Management, 5th edition, Atlantic Publishers (P) Ltd. New Delhi
3. **Gaur,V.P. and Narang,D.B** ,(2017), "*Income Tax Law & Practice*", 45th edition, Kalyani Publishers, New Delhi.

References
1. **Hariharan** (2017), "*Income Tax Law and Practice*", 12th edition, Tata McGraw Hill, New Delhi.
2. **Singhania, V.K.,** (2016), "*Direct Taxes, Law and Practice*", 22nd edition, Taxman Publications, New Delhi.
3. **R.N. Lakhotia & Subash (2016), "*Corporate Tax Planning Handbook*",** 5th edition, Lakhotia Publisher, New Delhi.
4. **C.S. Kaushal Kuna Agarval (2016), "*Corporate Tax Planning*",** 10th edition, Atlantic Publishers (P) Ltd. New Delhi.

Human Resource Development

Semester III   Hrs.of Instruction /week:2T+2P
20**MBMC22H**   No. of credits   :3

Objectives:
1. Conceptualize the development of human resources with the latest methodologies and strategies.
2. Facilitate an understanding of the concepts, methods and strategies for HRD.
3. Impart knowledge on Design, Development of Training programs and evaluation techniques.

Unit I   Introduction   12 hrs.
Overview: Methods, Changing paradigm of HRD, Concepts, Scope, Objectives, Principles, Framework, Contribution of Subsystems to HRD Goals.

Planning and organising HRD system: Principles in designing HRD system, Linkage between HRD and organisational growth, Simultaneous Vs Sequential process, HRD models, HRD in Indian industries , **Challenges of Future HRD Professionals, Roles and competency requirements of HRD Professionals*.**

Framework of HR: Strategic HR Framework Approach, Integrative framework , Human Capital Appraisal Approach , HRD Score card approach , P-CMM Approach (People Capability Maturity Model) Approach.

Select an organisation to visit and prepare the competency requirements of HRD professionals and create a skill matrix.
 .
Unit II   Individual Development   12 hrs.
Development: Role Analysis Job fit and Role fit (Recruitment and Placement), Developing the Person in the Role (Performance Appraisal)-Beyond the Present Role (Potential Appraisal), Developing **Dyadic Relationships (Performance Review and Counseling)*,** Preparing for Advancement (Career Planning and Development).

Excel Applications in Recruitment, Selection, Placement, Performance Review.

Unit III   Career Planning and Counseling   12 hrs.
Career planning and Development: Nature, Principles, Strategies, Career Branding/ Employee Branding .

Counseling: Participants, Counseling Relationship, **Objectives and goals, counseling Process***, Types and Approaches , Developing Dyadic relationships, Preparing for advancement.

Latest Trends in HRD: Employee Empowerment, Emotional Intelligence , Quality of Work life, HR Accounting, HR Research, Competency Mapping, HR Matrix, HRD Audit, methodology, HRD Score card .
Experiential Exercises.

Unit IV   Learning   12 hrs.
Concept of Learning: Learning Principles, Components, Learning cycle, Learning pyramid.

Learning models: Bloom's Taxonomy, Kolb's, MUD Models of learning.

Learning Process: Approaches,   Learning styles-Hermann's Model, LSQ (Learning Style Questionnaire).

Learning Types: Blended Learning, Synergy for team Learning, Self-direct learning, Transformative learning, Double loop Learning, CRAMP Model-e-learning basics, LMS (Learning Management Systems)**, HRD in learning organizations***, video supplements.
Design an online Survey Instrument to understand Learning Styles of Individuals.

Unit V   Training and Development   **12 hrs.**

TNA Types: Model, six component Model, ADDIE model, Training Paradigms, Types and Methods, Training Models, General model for Training intervention, Designing Management Development programmes.

Design and Development: Principles of Training Design, Motivational Dynamics, Design Process, Models of training design, Determining training content, Selecting training method, Learning Activities and Lesson plan, Evaluation Criteria, Video supplements.

Evaluation of Training Programs - CIRO Model of evaluation, design of Training evaluation, Training cost benefit analysis.

Designing and Managing Assessment - Centres, Prerequisites, Tools used, **360° feedback as an instrument in assessment center*.**

Design a Training Component and its practical implementation- Design an online module for Training effectiveness.

(* - Self Study Portion)

Course outcomes:
On the completion of the course students will be able to

1. Develop rich theoretical base under pinning HRD as a key tool for organizational effectiveness.
2. Respond positively and innovatively to solve HR challenges with suitable interventions
3. Evaluate the challenges and design HRD system to develop skills, knowledge and attitude
4. Apply techniques in Motivation, Rewards Management, Training, Appraisal and other contemporary methods to improve the efficiency of employees.
5. Exhibit a personality who can be role model in developing positive mind set among employees

Text books:
1. **Aswathappa .K**, (2015) "*Human Resources & Personnel Management",* 7th edition, Tata McGraw Hill, New Delhi.
2. **David Mc Guire,**(2014) *"Human Resource Development",* 2nd edition, Sage Publications, USA.

References:
1. **Dalip Singh** (2006), "*Emotional Intelligence at Work"*, 3rd edition, Sage Publications, New Delhi.
2. **John Paulson,** (2005) "*Human Resource Development – Learning and Training for individuals",* 2nd edition, Kogen Page, London.
3. **Pandu Naik.G**, (2007) "*Training and Development-Text, Research and cases"*, 1st edition, Excel Books, New Delhi.
4. **Rao T.V. & UdayPareek** (2006),"*Designing and Management of Human Resource System",* 3rd edition, Oxford & IBH Publishing Co., Pvt., Ltd., New Delhi.
5. **Samuel.A.Malone** (2005), "*A to Z of Training and Development-Tools and Techniques"*, 1st edition, Jaico Publishing House, Mumbai.
6. **SubbaRao.P** (2008), "*Essentials of HRM and IR-Text, Cases and Games"*, 5th edition, Himalaya Publishing House, New Delhi.
7. **Tapomoy Deb**, (2006) "*Human resource – Theory and Practice",* 1st edition, Ane Books India, New Delhi.
8. **Rose Mary Thomson, Christopher Mabey** (2011), **"*Developing Human Resource*",** 2nd ,edition, Routledge, USA.

Project Management

Semester III   **Hrs.of Instruction /week:2T+2P**
20**MBMC22O**   **No. of credits**   **:3**

Objectives:

1. Provide insight on project evaluation and management.
2. Introduce Project Management tools and techniques.
3. Conceptualize the framework for proposals, their planning and management.

Unit I   Overview   12 hrs.
Project Management: Definition, Project life cycle, Project ideas and innovation. Project goal, Time cost and requirements. Planning and Implementation of R and D Project Resource survey, Market researches **Industrial policy, government incentive and regulations*.**

Unit II   Project Appraisal   12 hrs.
Environmental Appraisal : Management, Commercial, Market, Economic, Technical and financial appraisal, Social Cost Benefit analysis and Project Risk Analysis.

Project Appraisal : Criteria, Methods (NPV, Internal Rate of Return, Payback period and other methods). Appraisal in line with banker's viewpoint, Profitability Analysis.

Project Proposal and Presentation*.

Unit III   Cost estimation   12 hrs.
Cost escalation and cost estimation : The System Development Cycle, Life cycle cost, Cost estimation process, Elements of budgets and estimates, Project cost accounting systems, Budgeting using Control (cost) Accounts, Cost summaries, Schedules and Forecast.

Cost of the project, sources of finance, international finance and foreign exchange regulation*.

Unit IV   Project Contracts   12 hrs.
Project Planning and Co-ordination : Types of Project Contracts,Project scheduling and monitoring through PERT, Network Diagrams ,CPM and other tools and techniques, Variability of Activity Duration, **Theory of Constraints and Critical Chain methods*.**

Unit V   Quality Control   12 hrs.
Project Quality Management : Concept of Quality, Process, Need for Quality control, Techniques for Quality Control, Acceptance sampling, **Six Sigma concepts and its implementation in organizations***, Environmental audit and its impact.

Application of MS Project in Implementation of Projects.

(* - Self Study Portion)

Course outcomes:
On the completion of the course students will be able to

1. Identification, selection and initiation of individual projects in an enterprise and demonstrate a strong working knowledge of ethics and professional responsibility.
2. Evaluate the feasibility of the project across various functions and will be able to prepare feasibility report for project acceptance.
3. Conduct project planning activities that accurately forecast project costs.
4. Critically evaluate the possible time and resource requirement for the completion of the project

Text books:

1. **Prasanna Chandra** (2014), "*Projects-Planning, Analysis, Selection, Financing, Implementation and Review*" 8th edition, Tata Mcgraw-Hill Publishing Co Ltd, New Delhi.

References:
1. **Gary Heerkens** (2003), "*Project Management*", 2nd edition, Tata McGraw-Hill Publishing Co. Ltd, New Delhi.

2. **John M. Nicholas** (2002), "*Project Management for Business Technology***: *Principles and Practice*", 1st edition, Pearson Education, New Delhi.

3. **Nagarajan .K** (2005), "*Project Management*", 1st edition, New Age International Publishers Pvt Ltd, New Delhi.

4. **Bhattacharjee .S.K** (2004), "*Fundamentals of PERT/CPM and Project Management*", 4th edition, Khanna Publishers, New Delhi.

5. **Dale F. Cooper** (2005), "*Project Risk Management Guidelines: Managing Risk in Large projects and Complex Procurements*" 2rd edition, John Wiley& Sons Ltd, West Sussex.

<div align="center">**Retail Consumer Behaviour**</div>

Semester III   **Hrs.of Instruction /week:2T+2P**
20**MBMC22R**   **No. of credits**   **:3**

Objectives
- Provide insights on retail shoppers and behaviour
- Familiarize with models & theories of Consumer Behaviour from retailer perspective.
- Enable application of marketing research process to understand shoppers and   shopping behaviour .

Unit I Overview   **12 hrs.**
Retail Shoppers : Retail shopper characteristics, changing dynamics of shoppers' behavior.
Shopping Behaviour: Types, Factors Influencing Shopping Behavior, Motives-Product and patronage.

Unit II   **Influences On Shopper Behaviour**   **12 hrs.**
Internal : Personal Characteristics: Attitude, Perceptions, Learning, Personality, Lifestyle and Self-Image, Inter Personal – Communications, Persuasion, Family, Group, and Store's Employees.
External: Socio-culture, Technology**,** Store Location, Shop Atmospherics, Online Retail Shoppers Behavior, Relational Bonds, **Technology influence on shopper behaviour**.

Unit III   **Shopping process and behaviour**   **12 hrs.**
Shopping process: Dimensions and Approaches To Retail Shopping Behavior, Pre shopping, Shopping and Post Shopping Behavior, **Diffusion of innovations in retail context***, Outshopping Behaviour and Retail Leakage.

Unit IV   **Shoppers Decision Models**   **12 hrs.**
Decision Models: Nicosia Model of Consumer Decision-making, Howard-Sheth Model , Engel, Blackwell, Miniard Model , Attitude Intention And Behavior Models, Consumer Comfort Model, Store Choice Behaviour Models, **Mall shoppers – profile and behaviour***

Unit V   **Market research and Global Behaviour**   **12 hrs.**
Market research: process, **retail information systems***, Applications of Business Analytics in Retailing. Shopper Profiling and Link Analysis.
Global Consumer Behaviour: Online Buying Behavior, Consumer Buying Habits and Perceptions of Emerging Non - Store Choices. Research and Applications of Consumer Responses to Direct Marketing Approaches, **Issues of privacy and ethics*.**

Course Outcomes
On successful completion of the course the student will be able to:
1. Identify retailer shoppers profile and design STP strategies.
2. Link the shoppers behaviour to   design strategies.
3. Design market research processes to capture shoppers characteristics and behavior.

Text Books
1. **Leon G. Schiffman, Leslie Lazar Kanuk**,(2004) '*Consumer Behaviour'*,Pearson Prentice Hall, 8th Edition, New Delhi.
2. **Barry Berman, Joel R Evans** (2012), "*Retail Management – A Strategic Approach"*, 12th edition, Pearson Education, New Delhi

References
1. **S.C. Bhatia** (2008), *"Retail Management"*, 1st edition, Atlantic Publishers & Dist.
2. **Gibson G. Vedamani** (2003) **"Retail Management"**, 4th edition, Jaico Publishing House, Mumbai.
3. **Chetan Bajaj, Rajnish Tuli, Nidhi Varma Srivastava** (2010) "*Retail Management*", 2nd edition, Oxford University Press,.
4. **Swapna Pradhan** (2012), **"Retailing Management Text & Cases"**, 4th edition, Tata McGraw Hill Publishing Company, New Delhi..

Micro and Small Business Management

Semester III   **Hrs.of Instruction/week : 4T**

20**MBMC22E**   **No. of credits: 3**

Objectives:
1. Enable the students to know the importance of micro and small scale business for economy growth.
2. Provide insights on the opportunities and challenges for starting micro and small business
3. Develop skills to evaluate the operating intricacies of running micro and small business.

Unit I   **Introduction**   **12 hrs**
Basics of Micro and Small Business (MSB): Definition, Features , Role of MSB in Economic Development in the context of Liberalization, Privatization and Globalization, Relationships between Small and Large Units, MSB in India, Family Business, Industry clusters, **Reasons for Failures, Crisis Management*.**
Design and Change in Organisations: Steps in Setting up a Small Business , Organisational Design and Organisational Culture, Change Management - Changing Scenario of MSBs Competitiveness, Quality control and Branding, Clusters and Cluster Development- Cluster approach, Development strategy, Linkages, Capacity Building, Conceptual framework for cluster development, Revenue Models, Indian and International experiences.
Start – up Strategies: Identification of Business , SWOT Analysis, Forming the business, Sources of Finance, Start up strategies - Business Model preparation – Market research, business plan,Integrating Business Plan and business model, procedures for setting MBS.

Unit II   **Dynamics of Small and Medium Business**   **12 hrs**
Regulatory Support : Rules and regulations- Small and Medium Enterprises Act, Government Policy and Development of MSBs, **Reservation of items for MSBs*** , Problems of MSBs – Sickness: Causes, Symptoms and Cures.
Institutions Supporting Micro and Small Business
Institutional Support – District Industry Centre, Small Industries Services Institute, Entrepreneurship Development Institute of India, National Institute of Entrepreneurship and Small Business Development, National Board for Micro, Small and Medium Enterprises (NBMSME), Technological Up gradation and Institutional facility, – Incentives and Subsidies for MSB , Business Development Service providers in India, Clusters and Cluster Development programs. **Role of Women SHGs in Micro Enterprises*.**

Unit III   **Management of Small Business**   **12 hrs**
Marketing and Logistics for MSBs : New Product Development, Product segmentation, Pricing and promotion strategies – Sales management for small business – Customer service for small business, **Role of Co-opertive societies, networking for marketing***, Logistics - Elements-vertical integration to virtual integration, transiting from Made-to-stock to Build to order
Finance and Accounting for MSBs:- Financial and Management Accounting, Inventory management, Financial Analysis and Financial Management, Taxation norms.
IT for Small Business: Integrated IT process solutions for registration and finance, ERP for MSBs, E-commerce and Small Enterprises

Unit IV   **AGRO Based and Allied Micro and Small Business**   **12 hrs**
AGRO Business – Significance, Allied activities of agri business, - Agro processing, Animal husbandry, Marine Based Business, Generic Resource Based Business, Artisan Resource Based Business
Micro Enterprises - Village and Cottage Industry, Handicrafts, Manufacturing, Retail Trade and Services*.

Unit V   Small and Medium Enterprises in International Business   12 hrs
Export Opportunities: Identifying foreign markets, marketing plan for exports, export documents and Procedures for Small Enterprises
Institutional infrastructure : Export assistance, State trading in imports and exports**, working of state trading organisations in India*.**

Course Outcomes
 On the completion of the course students will be able to
1. Realize the importance of Micro and Small Business in India.
2. Identify various Instituional Support Schemes suitable for startups and other ventures
3. Equip to draft business plan for selected ventures.
4. Understand the opportunities in AGRO Based and allied sector.
5. Develop a business model which suits the micro and small business

Text Books
1. Indian Institute of Banking and Finance (2017), "*Micro Small and Medium Enterprises in India*", 2nd Editon Indian Institute of Banking and Finance, , New Delhi
2. **Shukla M.B**., "*Entrepreneurship and Small Business Management*", Kitab Mahal, New Delhi, 2016, 7th Edition.

References
1. **Raman Jokhakar(2017)** "*Make it in India – Handbook on Starting and Doing Business*" 1st edition, 2017, Jain Book Agency Publishers, New Delhi
2. "*SSI IN India- An engine of Growth*"Govt. of India, Development Commissioner (MSME), Ministry of Micro, Small & Medium Enterprises, 2018
3. "*Cluster Development and Sectoral Progammes*" Govt. of India, Development Commissioner (MSME), Ministry of Micro, Small & Medium Enterprises, 2018
4. Poornima M Charantimath (2007). '*Entrepreneurship Development Small business enterprises*', 4th edition, Pearson Education, India

Internet Programming for e-Commerce

Semester III   **Hrs.of Instruction /week:2T+2P**
20**MBMC23S**   **No. of credits   :3**

Objectives:
1. Provide an overview of e-commerce and web Technology.
2. Highlight the interrelated modules of effective e- commerce applications.
3. Train in design of e commerce web pages.

Unit I   Introduction   12 hrs.

E-Commerce: Introduction, Benefits, Categories (B2B, B2C, B2A). Electronic Markets – Definition, uses, Advantages and Disadvantages, Functional electronic markets, Future of Electronic markets.

Electronic Data Interchange (EDI): **Definition***, technical aspects, Business implications.

Internet Commerce: Basic elements, Internet shopping, e-shop.

Architecture: Layer based Design - Presentation, Business, Application, Logic.

Website Design with Word Press: Domain name, types, Premium Domains, Web hosting, Web Technologies, Process of Web Publishing, Designing website, Flow of Web Information, Web Browser and Web Server, Search Engine. Word Press – **Benefits***, Word Press Installation, Default setting in WP, Types of themes, Plugins & Widgets.

Designing Prototype e-business site.

Unit II   User Interface Design   12 hrs.

Creating a Simple Static Web Page: HTML, Basic elements, Physical and Logical tags Path: Relative and Absolute path, Comments, Special Characters, Text Formatting tags.

Adding Links, Images, Background and Table: Hyperlinks, Creating links to web pages and URLs, Creating links within the same page, various types of URLs that can be used in links, image tag and their related attributes, Inline images, links to (external) images. Using Inline images, Using images as hyperlinks, **Popular images formats for Internet and HTML***.

Tables: Basic Table tags and their related attributes.

Unit III   Frames and Embedding Multimedia   12 hrs.

Frames, Image Map and Web Font Creator: Frames and their creation, Frame linking, Floating or Inline Frames, Image Maps, Client Side and Server Side image maps.

Form design: Form Controls, Text Controls, Password fields, Radio buttons, Check boxes, Rest and submit buttons, Form control selection, Option processing and text area.

Embedding Multimedia: Introduction*, Embedding Multimedia, Inserting Sound/audio formats, video file formats.

Unit IV   CSS and XML   12 hrs.

Creating a Dynamic Web Page: Cascading Style Sheets (CSS) – Defining style sheets, Features adding style to document, Linking to a single sheet, Embedding Style Sheet, Using inline Style, Style sheet properties, Font Properties, Color and Background properties, Text Properties, Box properties.

Webpage Designing Tools: PHP, GIMP, Blender and Inkscape

XML: Overview, Syntax, Document Type, **Definitions*** (DTDs), Document Object Model (DOM), Simple Application Programmer Interface (API) for XML (SAX), XML Namespaces, XML Schema. **XML Information Set (Infoset):** XLink, XPath, XPointer, eXtensible Stylesheet Language (XSL), XML and Databases.

Unit V Interactivity Tools   **12 hrs.**
VB Script: Programming in VB Script - Simple programs, Data Types, Program Flow, Variables, Client-Side and Server-Side Scripting, Integrating VB Script and HTML.

Java Script: Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security. Server side technologies -ASP/JSP.

*Self-Study Portion

Course outcomes:
On the completion of the course students will be able to
1. Demonstrate an understanding of E-commerce related programming, database, EDI, internet commerce and website design with word press.
2. Design an innovative WebPages and create links among the web pages by using related attributes
3. Develop frames and design forms using various form controls with embedding multimedia and Combine multiple web technologies to create advanced web components
4. Develop a dynamic webpage by the use of PHP, GIMP, Blender Inkscape and XML , focusing in common web implementations
5. Exhibit a client side and server side java application and design websites using appropriate security principles

Text Books
1. **Shay Howe W.** (2014), *'Learn to Code HTML & CSS: Develop and Style Websites',* 1st edition, Pearson Education, USA.
2. **Patrick Carey** (2010), '*New Perspectives on HTML, XHTML and XML'*, 3rd edition, Cengage Learning, USA.

References
2. **Mike Wooldridge** (2011), *'Creating Web Pages Simplified'*, 1st edition, John Wiley & Sons, USA.
3. **Kris Jamsa, Kinrad King and Andy Anderson** (2008), *'HTML and Web Designing: Tips and Techniques',* 1st edition, Tata McGraw Hill, New Delhi.
3. **Thomas Powell** (2010), *'HTML & CSS: The complete Reference',* 5th edition, Tata McGraw Hill, New Delhi.

Hotel Management

Semester III   Hrs.of Instruction /week:4T
20MBMC24A   No. of credits   :3

Objectives:

1. Inculcate the concepts of Hotel Management.
2. Orient on the different activities in Hotel Administration.
3. Provide practical orientation to Hotel Management.

Unit I   Introduction   12 hrs.

Development : Hotel Industry in India, Types - Commercial hotel, Resort hotel, Residential hotel, motel, hotel chains, Classification and star system, **Federation of Hotel and Restaurant Association of India*,** International Hotel Association, Institute of Hotel Management, Catering and Nutrition.

Hotel Management: Internal environment, Functional area-   Sales and Marketing, Personnel and training, front office, Food and Beverage, House-keeping, Maintenance and engineering, Leisure Facilities department.

Unit II   Service Management   12 hrs.

Front office management : Role, Importance, Organisation and Responsibility.

House keeping functions : Role, Importance, Housekeeping control, Cost of labour and material, Budget, Housekeeping records and documents, Role of supervision.

Catering Function : Responsibilities and Organisation, **Catering outlets, Functions and Policies*.**

Types of Accommodation : Intermediary accommodation and Grouping of accommodation.

Unit III   Production Planning And Control   12 hrs.

Production Planning : Production cost control , Methods of preparation nutrition content, Types of menu, Standard recipes, Various types of service - bar, room table, lounge, buffet and drive ins.

Materials Management : Purchasing, Daily market list, **Specifications and quality control - preservation, stock-taking***, Storage systems, Inventory levels.

Food and Beverage Management : Types of customers and food service styles, Functions, Control and performance measurement.

Unit IV   Financial Management   12 hrs.

Accounting department : Cash management, credit handling, Profit and loss account, Computerisation of accounts, Operating yard sticks, **Targets and gaps - Costing***, Food cost reports, recipe costing, Menu pricing, Control measures, Budgets, Cost and prices, Sales tax, Service tax, Service charges, Cover charge, Stock- taking.

Unit V   Human Resource Management   12 hrs.

Personnel department functions : Man power planning, Selection recruitment and training, **Performance appraisal and compensation***.

Marketing department: Market environment, Market segments, Sales Promotion, Advertising and public relations, Problems and Prospects of Hotel Industry.

(*- Self Study Portion)

Course outcomes:

On the completion of the course students will be able to

1. Conceptualise the framework of hospitality industry along with its formats and divisions.
2. Design customer friendly strategies in front-office and housekeeping functions.
3. Create innovative menu with due consideration to nutrition, quality, materials, costing and pricing.
4. Ensure cash flows through effective sales forecasting, marketing and cost control techniques.
5. Apply interpersonal skills in employees and customer management and to facilitate operations in multicultural workplace.

Text books:

1. **Demmey .G. Rutherford**, **Michael J.O. Fallon** (2011), *'Hotel Management and Operations'*,5th edition, John Wiley, US.
2. **Yogendra.K.Sharma (2010),** *'Hotel Management Educational and Environmental Aspects',* 2nd edition, Kanishka Publishers, New Delhi.

References:
1. **Sudhir Andrews** (2008), *'Hotel House Keeping Management and Operations'*, 2nd edition, Tata MacGraw Hill, New Delhi .
2. **Sudhir Andrews**(2008), *'Text book of Front Office Management and Operations'*, 1st edition, Tata MacGraw Hill, New Delhi.

Hospital Management

Semester III   **Hrs.of Instruction /week:4T**
20**MBMC24B**   **No. of credits :3**

Objectives:
  1. Impart knowledge on Hospital Administration, Planning and Control.
  2. Provide insights into various functions of hospital administration.

Unit I Overview   12 hrs.
Hospitals: History, Growth and Classification, Hospital Administration, Introduction, Principles, Responsibilities, Functions, Types of medical care, Review of Health administration in India, Problems unique to India, **Indices for measuring the efficiency of a Hospital***.

Unit II Facilities and Services   12 hrs.
Planning Hospital Facilities and Services: Principles, Stages in promoting and building a new hospital, Administrative services, Finance, Personnel, Marketing, **Planning and Designing Medical and Ancillary services*.**

Unit III Clinical and Non-Clinical Services   12 hrs.
Clinical services : Out patient, Medical, Surgical, Paediatric, Dental, Psychiatric, Imaging, Ophthalmology, Orthopaedic, Casualty and Emergencies, Anaesthesia, Neuro, ICU, Coronary Care, Special Clinics.

Non-Clinical services: Enquiry, Nursing, Ward Management, House keeping, Pharmacy, Blood bank, Central Sterile Supply Services, Dietary Services, Hospital laundry, Medical Records, Mortuary, Maintenance and Repair, Communication and Transport, **Campus security with Fire Prevention*.**

Importance: Function, Organisation, Staffing pattern, Utilisation and Work load, Records, Location, Area and Space, Equipment and Supplies, Standards and evaluation.

Unit IV Control   12 hrs.
Control Aspects : Financial, Hospital budget Planning Forecast, Fund allocation, Accounting procedure, Records, Internal audit, **Cost benefit analysis*.**
Materials : Inventory control Medical stores, Surgical stores, Linen stores, General stores, ABC analysis, Lead time, EOQ, Carrying cost, Safety stock, Re-order level.

Unit V HIS   12 hrs.
Hospital Information System :Computer system design, Evolution of HIS, HIS solution, Patient Information System, Drugs Information System, **Comprehensive Enterprise wide system***.
(*- Self Study Portion)

Course outcomes:
On the completion of the course students will be able to

1. Understand the structure and networking of health care industry, its administration and challenges.
2. Plan and execute administrative activities and support services for a sustainable health care delivery.
3. Promote patient centred care with continuous quality improvement in clinical and non-clinical areas.
4. Ensure smooth functioning of core process by forecasting, streamlining patient flow, staff scheduling, planning space/ facilities/ supplies, maintenance, costing and budgeting.
5. Utilise information technology for optimisation of all resources in the hospital.

Text Books

1. **A.V.Srinivasan** (2008), "*Managing A Modern Hospital"*, 2nd edition, Sage Publications, New Delhi.

References Books

1. **Dr.S.L.Goel** (2007), *"Health Care System and Management"*, 4th edition, Deep & Deep Publications Pvt Ltd, New Delhi.
2. **Nagendra V. Chowdary** (2005), "*Health Care Sector"*, 2nd edition, ICFAI University Press, Hyderabad.
3. **R.C.Goyal** (2009), *"Hospital Administration and HRM"*, 5th edition, PHI Pvt Ltd, New Delhi.
4. **G.D.Kunders** (2006), "*Hospitals Facilities Planning and Management"*, 2nd edition, Tata McGraw – Hill Publishing Co. Ltd, New Delhi.

Retail Management

Semester III   Hrs.of Instruction /week:4T
20MBMC24C   No. of credits   :3

Objectives:
1. Familiarize the fundamental concepts of retailing.
2. Enhance knowledge on strategic planning in retailing.
3. Provide a framework for creating and sustaining value through retailing.

Unit I   Introduction   12 hrs

Retailing: Concept, Function, Framework, Market retail equation , **Challenges*.**
Models and theories: Development of retail formats, Theories of retail development– Environmental, cyclical, Conflict, Life cycle in retailing.
Business models in retailing: Ownership, Merchandise offered, Non-traditional retail formats.

Unit II   Strategic planning   12 hrs

Strategy : Mission, situation analysis, Branding , Retail value chain.
Targeting: Identifying and understanding consumers: Demographics and life styles, Needs and desires, Attitude and behavior, Environmental factors.
Retail location: Trade area analysis , Characteristics**, Site Selection –types of location*,** evaluation**.**

Unit III   Merchandise Management   12 hrs

Retail Merchandising: Philosophy, Buying organization – Formats, Processes, Devising a merchandise plan - Merchandise sourcing, Category management, Implementation, Logistics, Inventory management, **Private label brands**.*
Store Administration: Floor space management, Managing store inventories, Display, Role of Visual Merchandiser, Visual Merchandising Techniques.

Unit IV   Pricing and Channel management   12 hrs

Pricing strategy: Objectives, pricing policies, Strategies, Implementation and Price Adjustments.
Marketing Channels: Definition, Functions, Strategies - Intensive, Selective and   Exclusive distribution.
Channel Management – Selection, Channel Conflicts and   Resolution,   Channel performance evaluation.
Mall Management: Types of various retail formats, Concepts in mall design.

Unit V   Retail Operations   12 hrs

Financial management: Inventory valuation, Merchandise forecasting and budgeting, Unit control systems, Financial inventory controls.
Legal : Legislation for retailing, FDI in Retailing, Issues in International Retailing.
Technology: Bar- coding, RFID, Electronic payment systems and others.
Human Resource Management: Setting retail organization, Organizational patterns in Retailing, **human resource environment.***
(*- Self Study Portion)

Course outcomes:
On the completion of the course students will be able to
1. Understand various formats and models of retail chains in India and across Globe.
2. Perform STP (Segmenting, Targeting and Positioning) of retail formats.
3. Develop plan for merchandise procurement, display and visualization.
4. Plan and implement strategies relating to 6P's of Retailing such as location, operations, merchandising, pricing, image and promotions.
5. Comply with regulatory bodies and leverage technology to optimize retail businesses.

Text Books

1. **Swapna Pradhan** (2012), **_"Retailing Management Text & Cases"_**, 4th edition, Tata McGraw Hill Publishing Company, New Delhi.
2. **Barry Berman, Joel R Evans** (2012), "**_Retail Management – A Strategic Approach"_**, 12th edition, Pearson Education, New Delhi.

References

1. **S.C. Bhatia** (2008), **_"Retail Management"_**, 1st edition, Atlantic Publishers & Dist.
2. **Gibson G. Vedamani** (2003) **_"Retail Management"_**, 4th edition, Jaico Publishing House.
3. **Chetan Bajaj, Rajnish Tuli, Nidhi Varma Srivastava** (2010) "**_Retail Management"_**, 2nd edition, Oxford University Press.

Financial Services

Semester III   **Hrs.of Instruction /week:4T**
20**MBMC24D**   **No. of credits   :3**

Objectives
1. Provide knowledge on key areas relating to management of Financial services.
2. Enhance skills to carve a career in the areas of financial services.

Unit I   Introduction and Evolution   **12 hrs**
Financial services: Meaning and concepts, Characteristics, Types, Objectives/Functions, Importance, **evolution and growth***, Regulatory frame work.

Unit II   Mutual Funds and Merchant Banking   **12 hrs**
Mutual funds: Meaning, Origin and growth, Constitution and Management, Types, Advantages and disadvantages, Performance, Regulations Insurance Services – Introduction, Principles, Types, Intermediaries, Regulations.
Merchant Banking : Meaning, Nature and functions; Merchant banking in India, Role in issue management; Classification and regulation of merchant bankers by SEBI.

Unit III   Hire Purchase, Leasing, Venture Capital and Factoring   **12 hrs**
Leasing: Definition, Types, Advantages and limitations for lesser and lessee Hire-purchase – Meaning and features, Rights of hirer, Difference between leasing and hire purchase financing.
Venture capital: Concepts and characteristics of venture capital, Stages of investment/financing, Venture capital in India, Regulatory frame work.
Factoring: Meaning, Mechanism, Types, **Advantages and Disadvantages***, Factoring Vs bill discounting, Indian scenario.

Unit IV   Stock Broking, Credit Rating, Securitization and Depository Services   **12 hrs**
Stock Broking: Meaning, Types of Stockbrokers, Sub-Brokers; Stock Broking in India, e-Broking – meaning, Indian experience.
Credit rating: Meaning, Origin, Importance, Rating system, Regulatory framework (SMERA).
Securitization of debt : Meaning, Features, Mechanism, Types, Special Purpose Vehicle, **Benefits of Securitization***, Issues in Securitization.
Depository services: Depository system, Depository participant, SEBI guide lines, Dematerialization and rematerialisation of shares, Electronic settlement of trade.
Plastic money: Concept , Different forms, **Credit and Debit card***, Credit card Cycle, Advantages and limitations, Factors affecting the usage of cards, Future outlook.

Unit V   Marketing of Financial Services   **12 hrs**
Marketing of Financial Services: Definition; Four pillars (customer orientation, Profit, Total company effort, Social responsibility); Selling versus marketing Segmentation – Concept, Basis, Strategies; Target market selection, **Market Positioning Strategies*,**Pricing Strategy - Role of price, Pricing strategies; Pricing decisions.
Marketing Mix for Financial Services: 7 Ps - Product, People, Process, Promotion, Price, Place and Physical evidence.
(Case study discussions on Marketing mix for banks, Insurance companies, Mutual funds, Stock broking firms).

(*- Self Study Portion)

Course outcomes:

On the completion of the course students will be able to

1. Understand the array of financial products and services along with their regulations.
2. Demonstrate knowledge of functioning of Mutual Funds and Merchant Banking.
3. Analyse and identify suitable modes of financing (leasing, hire purchasing, venture capital and factoring) for capital formation and asset purchasing.
4. Conceptualise and utilize various financial services (stock broking, credit rating, dematerialization and digital money) for personal and professional growth.
5. Apply marketing strategies for promoting various financial services.

Text Books:
1. **Khan M. Y.** (2015) "*Financial Services"*, 8th edition, Tata McGraw-Hill, New Delhi.

References:

1. **Agarwal O. P**. (2013), '*Environment and Management of Financial Services*', 4th edition, Himalaya Publishing House, New Delhi.
2. **Batra G. S**. (2005), '*Financial Services: New Innovations'*,1st edition, Deep & Deep, New Delhi.
3. **Bhole L. M. & Mahakud J**. (2010), '*Financial Institutions and Markets: Structure, Growth & Innovations*',5th edition, New Delhi, Tata-McGraw Hill
4. **E.Gordon & K. Natarajan** (2016) '*Financial Markets & Services*', 10th edition, Himalaya Publishing House, New Delhi.
5. **Gurusamy S**.(2014) '**Financial services'**, 3rd edition, New Delhi, Tata McGraw-Hill, New Delhi.
6. **Lalit K.Bansal**,(1997) '**Merchant banking & Financial Services**',1st edition, Unistar Books, Chandigarh.
7. **Mantravadi P**. (2013) '*Financial Services'*, 2nd edition, ICFAI, Hyderabad.
8. **Pathak B. V**. (2014) '*Indian Financial System*', 2nd edition Pearson, New Delhi,
9. **Rose P. S**. (2013) '*Financial Institutions: Understanding and Managing Financial Services'*, 5th edition, Irwin, Boston.
10. **Shashi Gupta & Nisha Aggarwal**(2014), '**Financial services**',1st edition, Kalyani Publishers, New Delhi .
11. **Shiva Ramu S**. (1995), '*Global Financial Services'*,1st edition, South Asia Pub., New Delhi.

Environmental Management (Self Study)

Semester III   Hrs.of Instruction /week:1T
20MBMC25   No. of credits   :4

Objectives:
1. Sensitize on eco systems.
2. Create awareness on various disasters and its management.
3. Provide insights on bio conservation.

Unit I   Multidisciplinary nature of environmental studies   3 hrs.

Environmental resources: Definition, scope and importance, Need for public awareness, Natural Resources - Renewable and non renewable, Natural resources and associated problems- Forest resources, Water resources, Mineral resources, Food resources, Energy resources, Land resources.

Role of an individual: Conservation of natural resources, equitable use of resources, Sustainable lifestyles.

Unit II   Ecosystems   3 hrs.

Concept: Types, Characteristic features, Structure and function of an ecosystem: Producers, Consumers and Decomposers, Energy flow in the Ecosystem, Ecological Succession, Food chains, Food webs and ecological pyramids, Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems.

Unit III   Biodiversity and its conservation   3 hrs.

Bio diversity: Definition: Genetic, Species and ecosystem diversity, Bio geographical classification of India.

Value of biodiversity: Consumptive use, Productive use, Social, Ethical aesthetic and option values, Biodiversity at global, National and local levels, India as a mega diversity nation, Hot spots of biodiversity.

Threats to biodiversity: Habitat loss, Poaching of wildlife, Man wildlife conflicts, Endangered and endemic species of India, Conservation of biodiversity.

Unit IV   Environmental pollution and Human Population   3 hrs.

Pollution: Definition, Causes, Effects and control measures of Pollution.

Solid waste management: Causes, Effects and control measures of urban and industrial wastes, Role of an individual in prevention of pollution, Pollution case studies.

Disaster management: Floods, Earthquake, Cyclone and Landslides.

Human Population and the Environment: Population Growth, Variation among nations, Population explosion, Family Welfare Programmes.

Environment and human health : Human Rights, Value Education, HIV / AIDS, Women and Child Welfare, Role of Information Technology in Environment and Human Health, Case Studies.

Unit V   Social Issues and the Environment   3 hrs.

Unsustainable to sustainable development: Urban problems related to energy, Water conservation, rain water harvesting, watershed management, Resettlement and rehabilitation of people; Its problems and concerns. Case studies.

Environmental ethics and regulations : Issues and possible solutions, Climate change, Global warming, Acid rain, Ozone layer depletion, Nuclear accidents and holocaust. Environmental accounting, Case studies - Wasteland reclamation, Consumerism and waste products, Environmental Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act, Issues involved in enforcement of environmental legislation.

Course outcomes:
On the completion of the course students will be able to

1. Understand the environmental management approaches in India and internationally.
2. Recognize the generation, characteristics and impact on the environment of air, noise, water, solid waste and nuclear pollution.
3. Depict organizations as systems and their role in environmental management.
4. Explain how environmental management can be used as environmental protection and how organizations can define and manage risk.
5. Demonstrate the understanding of the relevant areas for application of environmental management tools as well as their strengths and limitations

Text Books:
1. **Bharucha, E.** (2003*), "Textbook for Environmental Studies",* 1st edition*,* University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune.

Reference s:
1. **Pepper, I.L., Gerba, C.P. & Brusseau, M.L.** (2011), *"Environmental and Pollution Science"*, 2nd edition, Academic press, USA.
2. **Raven, P. H., Hassenzahl,D.M. & Berg, L.R.** (2012*), "Environment",* 9th edition, John Wiley & Sons, USA.
3. **Timothy O'Riordan** (2014*), "Environmental Science for Environmental Management",* 2nd edition, Routledge, USA*.*
4. **Rao M.N and Datta AK,** (2009*), "Waste Water Treatment",* 3rd edition*,* Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi.
5. **Rosencranz, A. , Divan, S. & Noble, M.L.** (2001) , *"Environmental law and policy in India"*, 1st edition, Tripathi Publishers, Mumbai.

Internship Training

Semester III
20**MBMC26**   **No. of credits   :2**

- Students need to do a individual internship training for a period of 30 days in related domain areas and submit a report of the same.

- Project to be pursued and completed during the summer vacation, immediately succeeding the II Semester.

- This Project is to be valued internally and carries 100 marks.

Business Intelligence and Analytics

Semester IV   **Hrs.of Instruction /week:3T+1P**

20**MBMC27**   **No. of credits**   **:3**

Objectives:
1. Provide insights onapplications and issues in Business Intelligence Systems.
2. Impact knowledge on Data Warehouses and Big data.
3. Apply Statistical and Data Mining Techniques and draw rules on underlying business processes.
4. Understand the role of Business Analytics within an Organization.
5. Develop and Integrate Systems in Decision-Making Process.

Unit I   **Business Intelligence**   **12 hrs.**

Business Intelligence: Definition, Factors of Business Intelligence System, Real time Business Intelligence, Business Intelligence Applications, Types.

Business Intelligence Essentials: Creating Business Intelligence Environment, Business Intelligence Landscape, Types of Business Intelligence, Business Intelligence Platform, Dynamic roles in Business Intelligence, Roles of Business Intelligence in Modern Business- Challenges of BI.

Development and Implementation: Development Process, Business Intelligence Platform, Business Intelligence Platform Capability Matrix, BI Target Databases, Data Mart, BI Products and Vendor, **The Big Four Business Intelligence vendors*.**

Unit II   **Data Warehousing and Mining**   **12 hrs.**

Data Warehouse : Processes **-**: Analytical Processing, OLAP Operations, Architecture, Back-end Process, Building a Warehouse- Data Models, Concept Hierarchies, Deployment, Data Mart, ETL Tools, Data Cleaning, Virtual Ware-houses*

Data Mining: KDD- Stages , Issues,Challenges, Methodology, Applications.

Big Data: Strategy-Purpose, Customer profile, Finance, Operations, Competition, Risk, Measures; metrics and data- Data types, Internet of Things, Anatomy, Backlash, Data generation methods, Metrics, Analytics-Text analytics,Speech Analytics, Video/Image Analytics, Behaviour Analytics, Combined;Results Reporting-Data Visualization, Connection Displays, Infographics, Management dashboards; Transform Business-Optimization of Business Process, Security and Fraud Reduction

Result reporting using Data Visualization, Connection Displays, Infographics, Management dashboards*

Unit III   **Business Analytics**   **12 hrs.**

Association Rules: Market Basket analysis, Partition Algorithm, Priori Algorithm, Pincer search Algorithm, Association Rules, FP Tree Growth Algorithm, Incremental and Border Algorithms.

Classification : Decision Trees, Construction algorithms and Pruning Techniques, Construction of Algorithms
Clustering: Types of Data, Partitioning Algorithms, Hierarchical clustering, Categorical Clustering**.**

Association Rule Generation and Clustering using SPSS/ Excel/ R programming*

Unit IV   **Advanced Anallytics**   **12 hrs.**

Genetic Algorithms (GA): Basic Steps, Selection, Cross Over, Rule Discovery, Decision tree, Clustering using GA
Neural Networks: Concept, Learning in NN**,**Unsupervised learning, Support Vector Mining (SVM).

Unit V   Applied Analytics   **12 hrs.**
Text Mining: Concept, Application, Techniques, Analytics
Web Mining: Concept, Purpose, Types- Content, Structure, Usage; Text Mining
Temporal and Spatial Mining: Temporal- Types, Tasks, Spatial Data Structures, Trend Analysis.
Spatial mining: Spatial Data Structures, Trend Analysis.
Practical case analysis using Google Analytics *

(* - Self Study andPractical Portion)

Course outcomes:
On the completion of the course students will be able to

1. Understand data mining and business intelligence tools , algorithms and its application to business problem solving .
2. Draw the difference and relationship of data to statistics and machine learning
3. Numericize real-life things and critique the role of information and analytics in supporting business processes and functions.
4. Build and enhance business intelligence capabilities by adapting the appropriate technology and software solutions.
5. Critique and interpret business intelligence and data mining reports prepared and effectively apply data mining techniques in a variety of business applications.

Text Books:

1. **Efraim Turban, Ramesh Sharda, Dursun Delen** (2011), **"Decision Support and Business Intelligence Systems",** 9th edition, Prentice Hall.India
2. **Arun K Pujari** (2013), *"Data Mining Techniques", 3rd edition, Universities press, Hyderabad, India.*

References:
1. **Han and Kamber** (2012), "*Data Mining: Concepts and Techniques"*,3rd edition, Morgan Kaufmann, USA.
2. **Larissa Terpeluk Moss &Shaku Atre**(2010), "*Business Intelligence Roadmap: the Complete Project Lifecycle for Decision-Support Applications"*, 11th edition, Addisson Wesley Publishers, USA.
3. **David Loshin**(2013), "*Business Intelligence: The Savvy Manager's Guide, Getting onboard with Emerging IT"*, 2nd edition, Morgan Kaufmann Publishers, USA
4. **Nils Rasmussen, Paul S.Goldy and Per O.Solli** (2009), "*Financial Business Intelligence: Trends, Technology, Software Selection, and implementation"*, 1st edition, John Wiley & Sons, USA.
5. **Prabhu, C.S.R**. (2004), *"Data Warehousing - Concepts, Techniques, Products and Applications",* 2nd edition, PHI, New Delhi.
6. **Robert Ericsson** (2009), *"Building Business Intelligence Applications with .net",* 2nd edition, Firewall Media publishers, New Delhi
7. **Robert J.Thierauf** (2001),*"Effective Business Intelligence Systems"*, 1st edition, Quorum Books, USA.

International Marketing

Semester IV   **Hrs.of Instruction /week:2T+2P**
20**MBMC28M**   **No. of credits   :3**

Objectives:
1. Provide insights on environmental, procedural, institutional and decisional aspects of international marketing.
2. Develop competencies in design of global marketing strategies
3. Enhance knowledge on the logistics procedures and practices in International trade
4. Provide overview on IT integrated international marketing processes.

Unit I Global Markets   **12 hrs.**
International Marketing: Concepts, Principles, Theories, Driving and restraining factors, Orientations of management, Global Marketing Planning and Strategies, Global Competition, the Global Economy, Building blocks of the global economies.
Global Marketing Environment: Economic, Social and Cultural Environment, Legal and Regulatory Environment, Trade and Investment Environment.
<u>**Competitive analysis of India with two other countries in various industrial sectors**</u>*

Unit II Global Marketing Strategy   **12 hrs.**
STP marketing: Global Segmentation, Targeting and Positioning Strategies.
Strategy and Structure: Management orientation, Business Operations, Comparative and Competitive Advantage of Nations, Theory of Competitive Alignment**,** Blue Ocean Strategy.
Global Entry and Expansion : Entry Strategies, Strategic Alliances, Global Souring Strategies, Choosing Export Markets selection, Market Access Considerations, Outsourcing strategies, Alliances, Mergers, Acquisitions. Digital Revolution- Technology Convergence, Global retailing.
<u>**Designing Entry Strategy for selected products**</u>*

Unit III   International Product And Pricing Strategies   **12 hrs.**
Product   Strategy: Characteristics Of Global Products, Product Design, Strategies For Geographic Expansion, New Products In Global Markets, Product Market Analysis, Manufacturing And Outsourcing Decisions, Product Quality Assurance Regulations.
Pricing Strategy: Export Pricing, Legal Constraints, Exchange, Fluctuations And Price Escalation, Global Pricing and Currency Fluctuations, Currency Gain/Loss Pass Through, Currency Quotation,Transfer Pricing-Determinants, Setting Transfer Prices, Minimizing the Risk of Transfer Pricing, Global Pricing and Antidumping Regulation, Price Coordination, Global Pricing Contracts (GPCs), Risk mitigation, International Dumping Regulation, Pricing in an inflationary situation.
 <u>**Global Product Design and Pricing - Problems and Solutions** </u>*.

Unit IV   Logistics and Promotion   **12 hrs.**
Global Business Operations: Manufacturing, E- Commerce strategies- Direct, Drop shipment.
Channel Decisions: Objectives and Constraints, Structure, Strategies, Innovations, Factors affecting channel choice, global e-commerce.
Physical Distribution: Order Processing, Warehousing**,** Inventory Management**,** Transportation, Logistics - Insurance, Freight Forwarders, Customs Brokers, Order fulfillment centers Decisions, Documentation, Legal Compliances.
<u>**Designing Drop Shiping Strategies for Products in Global Markets.**</u>

Unit V Promotions, Policies and Procedures   **12 hrs.**
Export Promotion: Measures, Federations of Indian Export organization, Export Promotion Councils, Commodity Boards, Global Advertising and Branding Strategies, Digital Marketing Strategies, Co-marketing strategies, Global Appeals and Media Decisions, Personal selling-

Relationship Marketing, Myers–Briggs Type Indicator, Cross culture negotiations,Negotiation Process
National Policies: Budget, EXIM policy, FDIs, FIIs, Foreign Exchange Management.
Export Procedures in India: Export and Import Process,   Documentation*, Export Finance.
Policies related to Strategic Alliances: Joint Ventures Collaboration, Mergers, Acquisitions, Ethical Practices
<u>Designing procedures to export products – internship and case presentation*</u>
<u>(*-Self Study and practical Portion</u>)

Course Outcomes:
On the completion of the course students will be able to
1. Exhibit knowledge of mega marketing forces on marketing decision-making.
2. Appreciate the global nature of marketing and appropriate measures to operate effectively in international settings.
3. Develop an innovative mindset to see dynamic business environments as opportunities, and make strategic market entry decisions in such environments
4. Understand and assess the challenges of turbulent global business environments and decide on localization or globalization of marketing strategies.
5. Design procedures and processes for exports and imports,international businesses and risk management.

Text Books
1. **Warren. J.Keegan** (2013), "*Global Marketing Management*", 8th edition, Pearson Prentice Hall. U.K.
2. **Charles .W. L Hill**, **Arun K. Jain** (2016), "*International Business – Competing in the Global Marketplace*", 11th Edition, Tata McGraw Hill Publishing Company Limited, New Delhi.
3. **Masaaki (Mike) Kotabe, Kristiaan Helsen,** (2017), **"*Global Marketing Management,*"** 7th Edition. Wiley Publications.

References
1. **Arvind V. Phatak, Rabi S. Bhagat, Roger J. Kashlak** (2009), "*International Management: Managing a Diverse and Dynamic Global Environment*", 2nd edition, McGraw- Hill, USA.
2. **P.Subba Rao** (2012), "*International Business- Text and Cases*", 3rd edition, Himalaya Publishing House, Delhi.

International Financial Management

Semester IV   **Hrs.of Instruction /week:2T+2P**
20**MBMC28F**   **No. of credits   :3**

Objectives:
1. Introduce the environment of international finance and its implications
2. Acquaint the nuances of foreign exchange market
3. Provide insights into financing and investment decisions of MNC's.

Unit I   Introduction and International Flow of Funds   12 hrs.

Overview : Importance, Nature and Scope, Theories of International Business, **International Monetary System** - Gold Standard, Bretton Woods System, Flexible Exchange rate regime, Current Exchange rate arrangements, **The European Monetary systems*.**

Balance of Payments (BoP) – Fundamentals of BoP, Factors affecting International Trade Flows.

Unit II   Foreign Exchange Market and Exchange Rates   12 hrs.

Function and Structure : Major Participants , Types of transactions and settlement dates, Foreign exchange quotations, Key issues in Foreign Exchange risk management, Approaches in currency risk management, Spot hedging, Leading and Lagging, Structural Adjustments, Types of foreign exchange exposures, Managing translation exposure. Measuring exchange rate – **Factors influencing Exchange Rate***, Exchange rate Systems, Forecasting exchange rate.

Unit III   Parity Conditions and Investment Decisions   12 hrs.

Parity Conditions : Purchasing Power Parity, Covered Interest Parity, Real Interest Parity, International Fisher Effect, **Parity Conditions and Managerial Implications*.**

Foreign Direct Investment : Theories, Modes of Foreign Direct Investment, International Capital Budgeting, Measurement and Management of Political Risk , International Portfolio Investment , Measuring portfolio returns.

Unit IV   International Securities Market and Working Capital Management   12 hrs.

Securities Market : Forwards and Futures, Hedging, Options , Financial Swaps, Currency swaps, Interest rate risk , Interest Rate Risk Management.

Working Capital Management : International Cash Management, **Accounts Receivable Management***, Inventory Management.

Unit V   Sources of Finance and Exchange Control Regulations   12 hrs.

International Capital Structure : Cost of Capital, Equity, Bond and Parallel loans, ADR, GDR, ECB, FCCB, Syndication, Short term instruments.

Institutions : Export Credit Guarantee Corporation (ECGC), FEMA, Exim Bank, Amendments, EOU/STPI, SEZ, EPZ, International Taxation, **Double Taxation Avoidance Agreement*.**

(*- Self Study Portion)

Course outcomes:

On the completion of the course students will be able to

1) Appreciate the complexities in international finance along with an outlook of monetary system and Balance of Payments structure.
2) Explain concepts and principles of exchange rate determination and its related calculations (spread, crossrates, premium and discount)
3) Identify the risk related to forex fluctuations and manage the exposures using appropriate hedging techniques.
4) Make feasible decisions regarding financing, investment and working capital in international environment.
5) Understand the regulations in international finance and capitalize on the support services rendered by various institutions.

Text Book

1. **Sharan, Vyuptakesh** (2012)*,"International Financial Management"*, 6th edition, Prentice Hall of India Pvt. Ltd, New Delhi**.**

References

1. **Apte P.G** (2008)*,"International Financial Management"*, 5th edition, Tata McGraw Hill Publications, New Delhi.
2. **Eun & Resnick** (2010)*, " International Financial Management"*, 4th edition, Tat McGraw Hill Publications, New Delhi.
3. **Jeevanandam .C** (2012) "*Foreign Exchange and Risk Management*", 15th edition, Sultan Chand & Sons, New Delhi.
4. **Kevin .S** (2011)*,"Fundamentals of International Financial Management"*, 6th edition, Prentice Hall of India Pvt. Ltd, New Delhi.
5. **Madura Jeff** (2012)*, "International Financial Management"*, 12th edition, Cengage Learning, US.
6. **Madhu Vij** (2009)*, "International Financial Management"*, 3rd edition, Excel Books, New Delhi.
7. **Maurice D. Levi**(2009)*, "International Finance"*,5th Edition, McGraw Hill, New York.
8. **Shapiro A.C.** (2010)*, "Multinational Financial Management"*, 9th edition, Wiley Publications, New Delhi.
9. **Somanath V.S.**(2011)*, "International Financial Management"*, 11th edition, I.K. International Publishing House Pvt. Ltd., New Delhi.
10. **Williams L. Richards** (2015), "*Currency: Fundamentals and Functions*", 1st edition, Design Publishing, Florida.

Industrial and Labour Relations

Semester IV   Hrs.of Instruction /week:2T+2P
20MBMC28H   No. of credits   :3

Objectives:
1. Understand the intricacies interlinked between organisational efficiency and performance with industrial relations.
2. Gain knowledge on the conceptual and practical aspects of industrial relations.
3. Apply Labour Laws to maintain industrial peace.

Unit I   Introduction   12 hrs
Industrial Relations: Definition, Scope,   Functions,   **Limitations. Changing facets**, Industrial Relations in India.
National Commission on labour: Labour Classification , Recommendations, IR in Public Sector Undertakings , Labour welfare measures, Sources and development of Labour Legislation, Major Principles of Labour Legislation, Labour Legislations- Factories Act, 1948, Shops and Establishment Act, 1947.

Unit II   Recruitment   12 hrs
Laws relating to recruitment : The Contract Labour (Regulation And Abolition) Act, 1970 ,The Interstate Migrant Workmen Act and Rules, 1979,The Apprentice Act, 1961, The Employment Exchange Act, 1959.

Unit III   Wages   12 hrs
Laws relating to Wages: Payment of Wages Act, 1936, The Minimum Wages Act, 1948, The Equal Remuneration Act, 1976 , The Payment of Bonus Act, 1965.

Unit IV   Industrial Disputes and Participatory management   12 hrs
Labour unrest : Industrial Disputes- Introduction, Forms , **Causes,** Strikes and Lock outs, Industrial Disputes Act 1947.
Participative management : Definition, Scope, Nature, Works committees, Joint Management Councils, Shop Councils, Collective Bargaining – Features, Principles.
Standing Orders Act 1946, Grievance procedure, Disciplinary proceedings.
Trade Unions - Definition - Objectives – **Functions*** -Trade unions Act 1926.

Unit V   Social security   12hrs
 Laws relating to social security: The Employees State Insurance Act, 1948 , The Employees Provident fund Act, 1952, The Employees Pension Scheme, 1995 -The Employees Deposit Linked Insurance Scheme, 1976 - The Payment of Gratuity Act, 1972 - The Employees Compensation Act, 1923 .
 Laws related to Women: The Maternity Benefit Act, 1961, **Vishaka Case***.
(*- Self Study Portion)

Course outcomes:
On the completion of the course students will be able to

1. Evaluate legal issues related to fostering industrial relations by understanding the workforce composition.
2. Assume top positions in handling IR issues successfully managing and resolving grievances.
3. Act as a bridge between Management and Employees in settling differences through amicable solutions
4. Formulate labour welfare measures that would enhance loyalty and commitment among employees
5. Regularise the implementation of statutory provisions in different Acts for the best interest of both employer and employees

Text Books

1. **Srinivasan** (2013)**, "*Laws relating to Different Acts*, Vol.1 to Vol.5" ,** 1st edition**, Madras Book Agency,Chennai.**
2. **Srivastava S.C**,(2012), **"*Industrial relations and Lasbour Laws*" ,** 6th edition,Vikas Publishing House, New Delhi.
3. **Subbarao** (2014), **"*Essentials of HRM and Industrial Relations- Text, Cases and Games*"**, 5th edition, Himalaya Publishers Co., New Delhi.
4. **Tripathi P.C**, "*Personnel Management & Industrial Relations*", (2017) , 4th edition,Sultan Chand & Sons, New Delhi.

References

1. **Mamoria C.B., Satish Mamoria, S.V.Gankar (**2016), "*Dynamics of Industrial Relations*", 16th edtion, Himalaya Publishing House, New Delhi.
2. **Mishra L.** (2008)**, "*Case Laws on Industrial Relations*"**, 1st edition,Excel Books, New Delhi.
3. **Singh B.D.,** (2008), "*Industrial Relations and Labour Laws*", 1st edition Excel Books, New Delhi.
4. **Singh B.D.,** (2009), **"*Labour Laws for Managers*"**, 1st edition Excel Books, New Delhi.
5. **Sen Ratna** (2015) **, "*Industrial Relations in India*"**, 2nd edition,Macmillan India Ltd., New Delhi **.**
6. **Tripathi P.C, Gupta C.B,Kapoor N.D (**2012)**, "*Industrial Relations and Labour Laws*",** 4th edition, Sultan Chand & Sons, New Delhi.

Lean and Agile Manufacturing Systems

Semester IV   Hrs.of Instruction /week:2T+2P

20**MBMC28O**   No. of credits   :3

Objectives:
1. Introduce lean production principles and practices.
2. Develop systems that are fast, flexible, focused and friendly for their companies, customers and production associates.
3. Introduce common agile methodologies and principles.

Unit I   Lean Production   12 hrs.

Introduction: Background, Lean Thinking, Importance of Philosophy, Strategy, Culture, Alignment, Focus and Systems View, **Discussion of Toyota Production System.***

Unit II   Lean Production Preparation and Processes   12 hrs.

Lean Production Preparation: System Assessment, Process and Value-Stream Mapping, sources of Waste.

Lean Production Processes: Approaches and Techniques, Importance, Tools- Workplace Organization, 5S, Stability, Just-In-Time – One piece flow – Pull, Cellular systems, Quick Change and Set-Up Reduction Methods, Total Productive Maintenance, Poka-Yoke – Mistake Proofing, **Quality Improvement, Standards, Leveling, and Visual management**.*

Unit III   Lean Implementation   12 hrs.

Employee Involvement : Teams, Training, Supporting and Encouraging Involvement, People in the Change Process, Communication, Importance of Culture, Sustaining Improvement and Change, Auditing, Follow-Up Actions, **Startup of Lean Processes And Examples of Applications.***

Unit IV   Agile Project Management   12 hrs.

Agile: Overview, Values, Principles, Methodologies

Scrum Methodology: Introduction, Roles and Responsibilities, Implementation of the Scrum Process, **Managing Projects with the Scrum Methodology. ***

Unit V   Agile Implementation   12 hrs.

Agile Implementation: Estimation, Tracking, Communication, Best Practices, **Critical Success Factors, Risks, Myths, Challenges, and Benefits.***

(*- Self Study Portion)

Course outcomes:
On the completion of the course students will be able to
1. Understand the key requirements and concepts of lean manufacturing.
2. Apply the tools in lean manufacturing to analyse a manufacturing system and plan for its improvements.
3. Appreciate the significance of lean culture to initiate a continuous improvement change program in a manufacturing organisation.
4. Grain global knowledge on agile systems and determine the methodologies of introducing agile and scrum system in an organization.
5. Critically evaluate and implement agile processes and scrums for designated projects and review in an organization with an eye for improvement

Text Books:
1. **Pascal Dennis** (2007), "*Lean Production Simplified*", 2nd edition, Productivity Press, New York.
2. **James Womack and Daniel Jones** (2003), "*Lean Thinking"*, Free Press, Revised Edition, New York

References:

1. **Jeffrey Liker and David Meier** (2006), "*The Toyota Way Field book"* 1st edition, McGraw-Hill, New Delhi.
2. **Don Topping, TomLuyster and Tom Shuker** (2002), "*Value Stream Management"* 12th edition, Productivity Press, New York.
3. **John Carroll, David Morris** (2012), "**Agile Project Management",** 2nd edition*,* In Easy Steps, Warwickshire.

E-Retailing

Objectives

1. Draw an understanding on e –retail and related marketing activities.
2. Demonstrate the success and failure of e-retaining effectiveness and efficiency.
3. Provide insights on the process , strategy and technology involved in selling products or services through electronic channels

Unit I Foundation   12 hrs

E – Retail: Meaning, Definition, Transition from Traditional Marketing to e-Marketing, formats, Adaptability and Closed – Loop Marketing, Advantages of e-Retailing, Shortcomings of e-Retailing. success and failures.

E-Retailing: The Current Trends: Current Trend Analysis and Measures, Current Status of Online Retailing, e-Retailing Statistics.

E-Commerce: Procedures and Methods: Meaning and Usage, B2B Model, B2C Model, C2C Model, B2G Model, P2P Model, M- Commerce. *****

Unit II Online Consumer Behavior and Marketing Mix   12 hrs

Online shopping behavior: Demographics and Targeting, Influential factors, Models: theory of reasoned action, Technology acceptance model, 4s framework of web marketing, extended models and theories.

E Retail Mix: Elements   convenience, customer value and benefits, cost, communication and customer relationship, computing and category management, customer franchise . Customer care and service. Cyber intermediaries, E supply chain management system, Online pricing; **factors affecting online pricing***, different methods, price discrimination in E-retailing, pricing strategies; dynamics pricing for E-retailing, Promotional strategies of E-retail business.

Unit III E-retailing business process   12 hrs

Business Process: Business Process Models in e retailing, Pre-order Customer Support Issues, Point of Order Customer Support Issues, Post Order Customer Support Issues. Design and implementation , design and implementation of m-commerce

Technology: Web-Hub Strategies, Web Architecture for Enterprise Applications, Web Services, Applications and Architecture Platforms

Security: Security on the Net, e-business **Risk Management issues*.**

Digital Payment Systems: Classification, Digital Payment Requirement, , Risk and the E-Payment Systems, Designing E-Payment System, E-Commerce Security Solutions.

Designing model e rtetailing website using PHP, Blender and Drupal*

UNIT IV   Digital Marketing   **12 hrs**

Ditial marketing of e–retailing : Meaning, Search Egine Optimization, Pay Per Click, Digital Display Advertising, <u>E-Mail Marketing*</u>, Social Media Marketing, Mobile Marketing, Analytics, Strategy And Planning

UNIT V   Customer Loyalty   **12 hrs**

Branding : Branding on the Web, Strategies, Practices.

Customer loyalty: Definition, Loyalty Programs and Follows Up Strategies, E –Services,   Customer Relationship Management and ERP for Customer Service, Integrating E –Retailing with the Organization.

E-retail equity: Strategies, Metrics and Measurement.

Course outcomes:
On the completion of the course students will be able to
1. Critically review and interpret the e- retailers and identify the process and strategies of e-retailing
2. Evaluate e retailing technology and implementation strategies.
3. Design e stores and e services for e commerce and m commerce.
4. Develop strategies for branding on the web.

Text books :
1. **Charles Dennis, Tino Fenech, Bill Merrilees** (2004), '*e-Retailing*', Routledge; 1st edition, Abingdon, United Kingdom
2. **Ian Dodson**(2016), '*The Art of Digital Marketing: The Definitive Guide to Creating Strategic, Targeted, and Measurable Online Campaigns',* Willey USA

References :
1. **Stuart Barnes, Brian Hunt,**(2000) 'e-Commerce and V-Business: Business Models for Global Success', 1st Edition, Butterworth-Heinemann, Oxford, United Kingdom
2. **David Kosiur** (1997), "*Understanding Electronic Commerce"*,1st edition,   Microsoft Press, US.
3. **Murthy.C.S.V.Murthy** (2016), "*e-Commerce, Concepts, Models and Strategies"*, 1st edition, Himalaya Publishing House, Mumbai.
4. **Dave Chaffey** (2008), "*E-Business and E-Commerce Management Strategy, Implementation and Practice*", 3rd edition, Pearson Education, US.

Social Entrepreneurship

Semester III   **Hrs.of Instruction/week : 4T**
20MBMC28E   **No. of credits: 3**

Objectives:
1. Understand how social entrepreneurship lies at the intersection of the fields of entrepreneurship and social change.
2. Explore the opportunities and challenges in the new landscape of Social Entrepreneurship.
3. Gain knowledge in different forms of social entrepreneurship, Funding Support and integration of other functional domains to create a competitive business Plan.

Units I: **Introduction**   **12 hrs**

Social Entrepreneurship: Meaning, Business Entrepreneur Vs, Social Entrepreneur, The change Masters, Rethinking Social Initiatives by Business, Strategies of High Impact Social Organisations, Models of sustainable social changes, Grassroots Civic Engagements.
Seven practical models of social change: launch, lead, manage, and evaluate a social venture- Charity, Market , Education, Policy , Grassroots,. Movement, Funding.

Unit II: **Forms of Social Entrepreneurship**   **12 hrs**

Profit setting: Social Enterprise, Thoughts on Business Plans.
Philanthropy and Hybrid Ventures: Corporate Philanthropy, Leadership, Competitive Advantage, Citizen Sector.
Nonprofits, Governments and Social Entrepreneurship: Nonprofit organization, Inductive Typology, New Landscape.

Unit III: **Capital/ Funding/ Financing**   **12 hrs**

 Sources of Financing: New Nonprofit Ventures, Social Venture Partners, Replication of Social Venture Partners, Social Venture Alliance, Merging Machine and Money, crowd funding, Angel investors, Cooperatives, Co-working. Exit strategies of Investors

Unit IV: **Marketing in Social ventures**   **12 hrs**

Social Marketing: Concepts, Roadmap, Theories and Models- Health Belief model(HBM), Theory of Reasoned Action (TRA) , Social Cognitive Theory (SCT), Stages of Change or Transtheoretical Model , Social Ecological Model(SCM).
Principles and Tools of Social marketing – Consumer Research, Segmentation, 4 Ps,
Framing social venture- Testing, Social Marketing Plan, Paradigm change and the emergence of spiritual values, Bottom-of-pyramid markets, New Business Models, Behavioral change, New Business Format.

Unit V: **Other Important Issues**   **12 hrs**

Scaling, Legal Issues, Change: Completed Business Plan. Social Responsibility in Business
Innovation and Leadership: Creativity and Skill building, Disruptive Vs. Radical Innovation, Diffusions of Innovation- five Adaptor Segments and Motives, Characteristics of Successful Social Entrepreneurs/ Social ventures - India and Abroad.
Measuring and Managing Performance: SROI Methodologies. Measuring Social Value Creation.

Course outcomes:

On the completion of the course students will be able to

1. Critically review and interpret about social entrepreneurship and its intersection of the various fields of entrepreneurship and social change.
2. Evaluate the opportunities and challenges in the new landscape of Social Entrepreneurship.
3. Develop as social entrepreneur,with full Funding Support and able to create a competitive business Plan.

Text Books

1. Nicholls, Alex (2008), *'Social Entrepreneurship – New Models of Sustainable Social Change'*,Oxford University Press, New Yark.
2. Wei-Skillern, J., Austin, J., Leonard, H., & Stevenson, H. (2007). '*Entrepreneurship in the Social Sector (ESS)',* Sage Publications, USA

References

1. **Bornstein, David**(2005), '*How to Change the World: Social Entrepreneurs and the Power of New Ideas'*, 1st edition, Penguin Books. New York
2. **Casson, M., Yeung, B. Basu, A. and Wadeson**(2008), N, *'The Oxford Handbook of Entrepreneurship',* 1st edition, Oxford University Press, New Yark.
3. **Elkington, J. and Hartigan, P**.(2008) *'The Power of Unreasonable People: How Social Entrepreneurs Create Markets That Change the World',* Harvard Business Press.
4. **Petre Drucker** (2014), `*Innovation and Entrepreneurship*`,1st edition, Routledge, New Yark.
5. **Welch, Wilford** (2008), '*Tactics of Hope: How Social Entrepreneurs are Changing Our World*`. San Rafael, Earth Aware, California, USA.
6. **Jennifer McCrae and Jeffrey Walker**(2013), `*The Generosity Network*`, Deepak Chopra Books, 1st Edition, Penguin Random Company, USA.
7. **Rupert Scofield**(2011), '*The Social Entrepreneur's Handbook*', McGraw-Hill
8. **Kotler, Philip and Eduardo Roberto** (1989) `*Social Marketing: Strategies for Changing Public Behavior*`. New York: The Free Press
9. **Paul N. Bloom & Gregory T. Gundlach**(2000), `*Handbook of Marketing and Society*`, Newbury Park, CA: Sage Publications

Computer Networks

Semester IV   **Hrs.of Instruction /week:2T+2P**
20MBMC29S   **No. of credits   :3**

Objectives:
1. Provide insights on the various Networking Technologies and process.
2. Impart knowledge the architecture and design aspects of networks.
3. Familiarize the importance of security in networks.

Unit I   Basics of Networking Technologies   12 hrs.

Introduction: Application, Requirements-Connectivity, Resource Sharing; Architecture-Layering and protocols, OSI Architecture, Internet Architecture; Network Software Implementation- Application Programming Interface, example, issues; Performance – Bandwidth and Latency, Highspeed Networks.
Connecting to Networks: Perspectives, Encoding, Framing, Error Detection, Reliable Transmission, Ethernet and Multiple Access Networks, **Wireless- WIFI, Bluetooth, Cellphone Technologies*.**
Network Components*

Unit II   Advanced Internetworking   12 hrs.

Internetworking /Packet Switching: Switching and Bridging- Datagrams, Virtual Circuit Switching, Source Routing, Bridges and LAN Switches; Basic Internetworking (IP)- Service Model, Global Addresses, Arp, DHCP,ICMP, Virtual Networks and Tunnels; Routing- Network as graph, Distance Vector(RIP), Link State (OSPF), Metrics; Implementation and Performance- Switch basics, Ports, Fabrics, Router Implementation.

Advanced Internetworking: Global Internet- Routing areas, Interdomain Routing(BGP), IP Version 6 (IPv6); Multicast- Addresses, Routing (DVMRP, PIM,MSDP); Multiprotocol Label Switching (MPLS)- Destination Based Forwarding, Explicit Routing, Virtual Private Networks and Tunnels; **Routing among Mobile Devices- Challenges, Mobile IP***.

Unit III   End to End Protocols   12 hrs.

Process to Communicate: Simple Demultiplexer (UDP); Reliable Byte Stream (TCP)- End to end Issues, Segment Format, Sliding Window Revisited, Triggering Transmission, Adaptive Retransmission, TCP Extension, Remote Procedure Call-RPC fundamentals, Implementation (SunRPC, DCE); RTP- Requirements, Design, Control Protocol.

Allocating Resources: Issues- Network Model, Taxonomy, Evalution Criteria; Queuing Disciplines- FIFO, Fair Queuing, TCP Congestion Control, Congetion Avoidance Mecahnisms, **Quality of Service***.

Unit IV   Linux   12 hrs.

Basic Concepts: Linux VPS Hosting, Difference between Linux and Windows Hosting, **Introduction to open source***, web servers, DNS, File and Directory, Data Command, Host Name from IP Address, Sort Command, Create, Update , Delete, Symbolic or Soft Command, Basic commands, File structure, File Function.

Spoken Tutorials on Linux

Unit V   Network Security   12 hrs.

Security Mechanisms: Cryptographic Building Blocks; Security Mechanism-Authentication Protocols, Message Integrity Protocols, Public Key Distribution; **Example System-PGP,SSH,IPSEC***, Firewalls.
Security Configuration: Setup and configure, two factor authentication, fire wall setup and configuration, Website security, file security, control access, server security, Practical application using case study.

Ubentu, Linux and Wordpress
(*-Self Study Portion)

Course outcomes:
On the completion of the course students will be able to
1. Understand the OSI Reference Model and in particular have a good knowledge of Layers and network components
2. Exhibit knowledge on datagram, switching, routing areas and internet working
3. Describe and analyze networking protocols and their hierarchical relationship hardware and software. Compare protocol models and select appropriate protocols for a particular design
4. Describe the basic concepts of Linux and analyze the difference between Linux and windows hosting.
5. Manage multiple operating systems, systems software, network services and security and develop solutions for networking and security problems, balancing business concerns, technical issues and security.

Text Books
1.   **Larry L. Peterson, Bruce S. Davie (2011),** *"Computer Networks: A Systems Approach",* 5th edition (revised), Elsevier-Morgan Kaufmann, NewYork.
2.   **Larry L. Peterson, Bruce S. Davie (2003),** *"Computer Networks: A Systems Approach",* 3rd edition, Morgan Kaufmann, NewYork.

References
1. **William Stallings**(2010), "*Data and Computer Communications",* 9th edition, Prentice Hall, USA.
2. **Andrew S. Tanenbaum** (2010)**, "***Computer Networks***",** 5th edition, Prentice Hall, New Delhi.
3. **Forouzan and Mosharraf**(2012*),"Computer Networks"*, Tata McGraw-Hill Education, New Delhi.

Digital Marketing

Semester III   **Hrs.of Instruction /Week: 2T+2P**
20MBMC30M   **No. of Credits: 3**

Objectives

- Provide insights about the digital marketing tools and processes
- Imbibe skills to develop digital marketing communications that will gain visibility
- Inculcate application of analytics for formulating digital marketing strategies
- Infuse knowhow to integrate the various digital marketing strategies

Unit -I Search Engine Marketing   12 Hrs

Digital Marketing: Concept, Principles, Process.
Search Engine Marketing: Searcher's Intent - Navigational, Informational, Transactional, Searcher's Device, Text, Clicks, Results, Customer Behaviour, Working of Search Engines- Content Analysis, Rule Based Personalization, Google Search, Google Adwords, Microsoft Adcenter, Yahoo Search Marketing.

Creation of Business Sites and Webpages using Google Business*

Unit II Search Engine Optimization   12 Hrs

Search Engine Optimization: Process, Search Engine Result Positioning, Search Behaviour, Goals.
On Page Optimization: Keyword Research, Process, Technical and Mechanics Aspects,   Site Maps, Google Search Console, Link integration.
Off-Page Optimization: Process, Link Formats, Link Building, Content Marketing, Social Sharing.
Analyze: Process, Key Performance Indicators, Law And Order.

Apply Keyword Research, Search Behaviour Analysis, SEO Techniques to modify business site created.*

Unit III Pay Per Click and Digital Display Advertising   12 Hrs

Pay Per Click Campaign (PPC):   Process, Goals, Campaign –Objectives, Architecture, Setup, Targeting, Ad Management-Bid, Delivery, Scheduling, Rotation, Keyword- Selection, Match Types, Keyword Research Tools.
Ppc Process- Ad Copy Composition, Creation, Extensions, Landing Pages, Bidding-Google Display Network (GDN), Remarketing, Adword Interface Navigation, Conversion Tracking, KPIs, Key Performance Reports, Data Segmentation, Reports, Google Impact Analysis, Law And Guideline.
Digital Display Advertising: Concepts, Technology, Process: Define, Target, Set- Objectives, Mechanics, Ad Formats, Budgets, Media, Format Options; Track, Configure- Targeting, Tracking, Going Live , Measure, Laws And Guideline.

Application of Google Adword, Keyword Research for PPC and display advertisement.*

Unit 1V Email, Social Media and Mobile Marketing   12 Hrs

E-Mail Marketing : Process- Spam Definition, Subscribers Management, Design Ad Content, Email Interaction Process, Confidentiality, Compilation, Integration, Delivery, Discovery, Reporting And Analysis, Laws.
Social Media Marketing: Goals, Media Types, Channels, Process- Creating Business Page, Profile, Channel, Blogs Page Engagement, Analytics, Social Sharing, Plugins, Network Building, Strategy, Implementation-Fit, Content - Planning , Scheduling, Platform Selection, Promotion, Integration, Analytics- Facebook, Linkedin, Twitter, Google.

Mobile Marketing: Mobile Optimized Websites, App Development, Mobile Ads–Formats, Search In – App Ads, Mobile Sites, Mobile Ads, Proximity Marketing, Laws.

Marketing Through Facebook, Twitter, Linkedin, Google+, Youtube, Blogs*

Unit V: Analytics And Strategy   **12 Hrs**

Marketing Analytics: Process, Goals, Concepts, Terms, Setup-Structure, Access Level, Navigation, Monitor- Audience, Behaviour, Acquisition, Behaviour Reporting And Analysis, Attribution, Customization, KPI Iterative Process.

Strategy And Planning: Digital Marketing Plan-Structure, Situation Analysis, Audience Definition – Building Customer Profile, Ranking, Multiscreening, Business Objectives, Activities- Define Value Proposition, Objectives, Channel Suitability, Budget, Content, Tools, Calendars, Digital Tools, Action Plan, Measurement, Iteration And Management – Integration, Analytics, ROI.

Google Analytics Application and Template Creation for Strategic Plans *

*- Practicals and Self learning

Course Outcomes:
By the end of the course the students will be able
- Develop digital marketing communications that will gain visibility.
- Design digital marketing plans and strategies.
- Integrate various digital marketing channels to promote business.
- Apply analytics for formulating digital marketing strategies and measuring effectiveness.

Text Books:

1. **Ian Dodson** (2018), *'The Art of Digital Marketing'*, Wiley India Pvt. Ltd., New Delhi
2. **Eric Enge, Stephan Spencer, Jessie Stricchiola**, (2015), *'The Art of SEO: Mastering Search Engine Optimization'* 3rd Edition, O'Reilly Media Inc., USA.
3. **Philip Kotler, Hermawan Kartajaya, Iwan Setiawan,** (2016), *'Marketing 4.0: Moving from Traditional to Digital'*, 1st edition, John Wiley and Sons Inc., USA.

Reference Books:

1. **Simon Kingsnorth** (2016), '*Digital Marketing Strategy: An Integrated Approach to Online Marketing*', 2nd Edition, Kogan Page, New Delhi.
2. **Mike Moran and Bill Hunt**, (2014) '*Search Engine Marketing, Inc. Driving Search Traffic to Your Company's Web Site'*, Pearson Education, New Jersey.

Semester IV   **Hrs.of Instruction /week:2T+2P**
20MBMC30F   **No. of credits   :3**

Objectives:
1. Understand the applications of managerial and cost accounting concepts in the contemporary cost management models.
2. Enhance knowledge on techniques of cost control and reduction.
3. Discuss issues relating implementation of cost management models in modern firms.

Unit I Strategic Cost Management   **12 hrs**

Strategic Cost Management: Conceptual framework, Environmental influences, **<u>Role of SCM in strategic positioning*.</u>**

Cost Control and Cost Reduction: Basics, Process, Methods and Techniques of cost reduction, **<u>learning curve*.</u>**

Unit II Strategic Decision making   **12 hrs**

Target Costing: Methodology, Methods of establishment of target costs, Attributable costing, Back-flush accounting, **Target selling*.**

Life Cycle Costing : Meaning, Characteristics, Importance benefits, Product Life Cycle Costing, **<u>Project Life Cycle Costing</u>***.

Relevant Cost Analysis : Relevant Cost, Irrelevant Costs - Sunk or Historical Cost, Committed Cost, Absorbed Cost, **<u>Fixed Costs and its relevance in decision –making*.</u>**

Unit III Strategic Costing   **12 hrs**

Transfer Pricing: Objectives, Methods - Cost Based, Market Price Based, Negotiated Pricing, **<u>Advantages and Disadvantages*</u>**, Criteria for setting Transfer Prices, Transfer Price in different situations.

Kaizen Costing : Concept, Procedure for implementation, Evaluation, **<u>Benefits and challenges*.</u>**

Unit IV Cost Allocation and Control   **12 hrs**

Activity Based Cost Management: Concept, Purpose, Benefits, Stages, Relevance in decision making, **<u>Traditional Vs. ABC System – Comparative analysis*.</u>**

Responsibility Accounting: Concept, Methods, Procedure, **<u>Advantages</u>***.

Unit V Contemporary cost management practices   **12 hrs**

Contemporary practices: Lean Accounting, Value analysis, Balance Score Card, Theory of Constraints, JIT – Introduction, Benefits, Specific performance measures in JIT, Business Process Re-engineering, Benchmarking, **<u>ERP and its application in strategic cost management*.</u>**
<u>(*- Self Study Portion)</u>

Course outcomes:

On the completion of the course students will be able to

1. Understand the strategic fit between cost management and organisation's objectives.
2. Design costing systems for the organizations based on their nature to ascertain cost and value.
3. Analyze ways and means of cost control, management and improvement.
4. Apply suitable cost allocation techniques for pricing decisions.
5. Demonstrate knowledge of contemporary cost management practices

Text Books

1. **Shank and Govindarajan** (2008), '*Strategic Cost Management: The New Tool for Competitive Advantage*', 1st edition, The Free Press, New York

References

1. **Blocher, Chen, Cokins and Lin** (2004), '*Cost Management: A Strategic Emphasis*', 3rd edition, Irwin/ Tata Mc. Graw Hill
2. **Horngren, Datar and Rajan** (2015*)*, '*Cost Accounting: A Managerial Emphasis*', 15th edition, Pearson Publications, New Delhi
3. **Hongren, Sundem, Stratton, Burgstahler and Schatzberg** (2015), 15th edition, *'Introduction to Management Accounting: Chapters 1-14'*, Pearson Publications.
4. **Shank** (2006), '*Cases in Cost Management: A Strategic Emphasis*', 3rd edition, South Western Publishing Co. Ltd.

Performance Management

Semester IV   Hrs.of Instruction /week:2T+2P
20MBMC30H   No. of credits   :3

Objectives:
1. Learn the importance of Performance Management System and its role in enhancing individual performance.
2. Enhance the knowledge in designing and developing Performance Management System for organizational effectiveness**.**
3. Identify best practices to handle challenging situations in Performance Management.

Unit I   Introduction   12 hrs

Performance Management: Defining Performance, Meaning of Performance Management (PM) , Historical developments, Aim and Role of PM - Contribution of PMS, Characteristic of an ideal PMS, Hindrances in implementation, PMS Integrating with other workflow process.

Unit II   Performance Management Process and Planning   12hrs

Performance Management Process: Prerequisites, Performance planning, Performance execution, Performance assessment, Performance review, Performance reward and re-contracting

Performance Planning: Theories of goal setting, Goal Theory and its Application in Performance Management, Control Theory and its Application in Performance Management, Social Cognitive Theory
Organisational Justice Theory and its Application in Performance Management.

Performance criteria : Principles and Process of setting performance criteria, Methodologies to assess performance, Linking individual and team goals to organizational goals, Goal Setting Procedure, Employee's Responsibility in Performance Planning Mechanics and Documentation.

Unit III Performance Measurement Approaches   12 hrs

Approaches: Determinants of performance – KPIs, Performance Dimensions, Performance Hierarchy, Approaches to measuring performance: Trait, Behaviour and Results

Measuring Results and Behaviors: Results, Determining Accountabilities, Objective and Performance Standards, Measuring Behaviors - Comparative System, Absolute System; Strategic Performance Measurement

Unit IV Performance Assessment   12hrs

Performance Appraisal Vs. PMS: Definition and Objectives of Performance Appraisal, Process of Performance Appraisal - Self Assessment and its importance

Performance Assessment:: Evaluating individual performance Methods of Performance Appraisal, Traditional and Modern Methods.

Failure of Performance Appraisal: Causes and Reasons, Halo Effect, Factors affecting Appraisals errors, reducing Rater Biases; Cultural issues in Performance Appraisal, Managing Expectations and Role of Communication in process.

.
Unit V   Performance Review and Counseling   **12hrs**
Performance Review: Significance of Performance review and discussion process. Performance development and personal plans, Coaching Style process

Performance counseling: Role of Performance Coaching, Counseling for better performance Feedback Mechanisms in organizations, Training the superiors to give constructive feedback, Levels of Performance Feedback.

Current trends in PMS: Emphasis on Continuous Feedback, 360 Degree Appraisal, Assessment Centers ,Potential Appraisal, Managing rewards - Linking Performance to Pay , Simple System Using Pay Band, Linking Performance to Total Reward, Challenges of Linking Performance and Reward, Use of Technology, Challenges in Performance Management Systems.

Course outcomes:
On the completion of the course students will be able to

1. Demonstrate proficiency in designing Performance Management models facilitating increased level of performance.
2. Employ analytical skills to decide appropriate model for assessing Employee behavior
3. Identify PM linkages to strategic business management
4. Assess critically the performance gaps and suggest new ways of PM
5. Summarise the activities in evaluating and managing employee performance

Text Books
1. **Herman Aguinus** (2014), **"*Performance Management*"** , 3rd edition , Pearson Education Limited, UK.
2. **T.V. Rao** (2016), ***"Performance Management:Toward Organisational excellence",*** 1st edition, Sage Publications India pvt., Ltd., New Delhi.

References
1. **Aswathappa.K** (2008), *HRM Text and Cases*, 7th edition, Tata McGraw Hill Publishing Co., Ltd., New Delhi.
2. **Chadha Prem** (2003), ***Performance Management- lt's about Performing - Not just Appraising,*** 8th edition, Macmillan lndia Limited, New Delhi.
3. **Gary Cokins** (2009)**,** ***Performance Management   :Integrating Strategy Execution, Methodologies, Risk and Analytics*,** 1st edition, Wiley and SAS Business Series, USA.
4. **Kohili A.S. and Deb T.** (2009),*Performance Management*, , 3rd edition, Oxford University Press, New Delhi.
5. **Rao T.V**.(2004), ***Performance Management and Appraisal Systems - HR Tools for Global Competitiveness,*** 1st edition, Response Books, New Delhi.

Innovation and Technology Management

Semester IV   **Hrs.of Instruction /week:2T+2P**

20MBMC30O   **No. of credits   :3**

Objectives:

1. Elucidate the basic concepts and themes pertaining to the nature and dimensions of technology and its management.
2. Provide holistic understanding of technology as a system.
3. Design support system of organisation structure, policies and requirements for technology management .

Unit I   Concepts and Themes   **12 hrs.**

Technology: Driving force of global industrial competition, The Axes ant Atlas of technology, Strategic management of Technology, Technology issues, **Design organisation to meet innovation*.**

Unit II   Technology Development   **12 hrs.**

Productivity and Incremental Innovation: Technology absorption, Technological Innovation, Crucial issues in flexible technology, Strategic evaluation of technology investments, Core competencies in technology**, Commercialisation***.

Unit III   Innovation in Organisations   **12 hrs.**

Innovation: Definition, Types, Need, Role of innovation, Sources, Innovation and change, Top level commitment, Long term perspective**, Various innovative products***.

Unit IV   Organizational Support System   **12 hrs.**

Structural Imperatives of Technology Management: Building organizational culture, Open lateral communications, **The organization as a laboratory for learning*.**

Organisation of Innovation –Mechanistic and Organic System of Management, Flexibility.

Unit V   Managing Innovation and Technology   **12 hrs.**

Analysing the company: Industry and Environment for IT readiness, IT enabled strategic innovation, Innovation and IT strategies alignment, Leading innovative teams, Encouraging creativity in teams- **Communicating about innovation - Overcoming obstacles to innovation*.**
(*- Self Study Portion).

Course outcomes:

On the completion of the course students will be able to

1. Update knowledge on technological changes and innovative business solutions for firm's sustainable development
2. Analyse the technology management challenges and provide solutions to manage technology in turbulent environment.
3. Apply critical thinking and employ problem solving approach to mitigate the hindrances in innovation and technology management.
4. Examine the role of innovation in organizational process and ensure innovation works as a core competency in technology management.
5. Display the breadth of skills changing the landscape of organizational success with highly recognized innovative practices to manage technology adoption.

Text Books:

1. **Rastogi, P.N.** (2009), *"Management of Technology and Innovation- Competing through technological excellence" 3rd edition*, Saga Publications India Pvt Ltd, New Delhi.

References:

1. **Frederick Betz** (2011), "*Managing Technological Innovation: Competitive Advantage from Change*" 2nd edition, John Willey and Sons, New Jersey.
2. **Mark Dodgson, David Gann and Ammon Salter** (2008), "*The Management of Technological Innovation*" 2nd edition, Oxford University Press, New York.
3. **Robert M.Verburg, J.Roland Ortt and Willemijn M.Dicke** (2006)**,** "*Managing Technology and Innovation*" 3rd edition**,** Routledge, USA.

Supply Chain and Logistics in Retailing

Semester III   Hrs.of Instruction /week:2T+2P
20MBAC30R   No. of credits: 3 hrs

Objectives:

1. Provide specific insights and nuances of retail supply chain and logistics.
2. Orient various formats of supply chain in Retailing.
3. Impart knowledge on various IT applications in retail supply chain and logistics

Unit I   Retail Supply Chain and Logistics: Basics   12 hrs.

Retail Supply Chain: Definition, Retail supply chain vs. Manufacturing supply chain, Supply Chain Flows, Retail Supply Chain Drivers: Innovation Driver; Extended Product Design; Globalization; Flexibility Imperative; Process Centered Management, Retail Supply Chain Performance, Retail Supply Chain Strategies, Comparative advantage: Concept of Distance; Revenue Control, Workforce Cost, Fixed Cost, Purchased Item Cost, **Green Supply Chain Practices***

Logistics for Retailing: Evolution, Concept, Organisation, Systems approach, Integrated logistics management, Logistics management Contract, Logistics Service providers, Special logistics for Retailing, Logistical packaging, Logistics outsourcing, **Green Logistics Management Practices***

Unit II   Merchandise Planning and Assortment Management   12 hrs

Category Management: Definition, Process, Enabling Components, Category Captain, Challenges

Merchandising: Meaning, Benefits, Types, Hierarchy, Forecasting Methods, Forecast Driven to Demand Driven, Demand Driven Tools and Techniques, Budgeting, Open to Buy Control

Assortment Management: Framework, Objectives, Selection, Plan, Store Clustering, Space Management Stages of Space Planning, Concept of Planograms, **Issues in Space management***

Unit III   Vendor and Inventory Management   12 hrs

Purchases and Retailer-Supplier Relationships: Retail sourcing, Green sourcing, International sourcing, Supplier selection and evaluation, Retailer-Supplier Relationship, **Factors Affecting Retailer-Supplier Relationship***, Order Management, Monitoring Supplier Performance

Inventory Management: Inventory for Retail Stores, Types, Costs, Inventory Techniques for Retailing: JIT, DRP, ABC, VMI**, Inventory Valuation Methods***

Unit IV Retail Supply Chain Categories and Infrastructure   12 hrs

Specific Retail Supply Chains: Supply Chain in Food and Grocery Retailing, FMCG, Apparel, Footwear, Consumer Electronics, Pharmaceuticals, Home Furnishing, Kitchen Utilities, Retailing, **Supply Chain in Non-Store Retailing***

Retail Supply Chain Infrastructure: Retail logistics, modes of transportation*, Transport economics and pricing, **s**torage and cold chains, logistics service providers; Material Handling, Packaging, Warehousing, Taxation and Regulation Issues**,** Reverse Logistics

Unit V   IT in Retail Supply Chain and Logistics   12 hrs

IT for Retail Supply Chain and Logistics: Information Systems, Electronic Point-of-sales devices, Automatic identifications and Data Capture (AIDC), Barcoding, Retail ERP, Retail Analytics, RFID, Product Tracking in Transit, **IT in CRM**, E-commerce Logistics.

Case Studies: Wall Mart supply chain, Amazon supply chain

(*-Self Study Portion)

Course outcomes:
On successful completion of the course, the students will be able to:
1. Appreciate the unique distinctiveness of retail supply chain from traditional supply chains.
2. Assess suppliers and maintain relationship with suppliers.
3. Design customized supply chain network for various retail formats.
4. Understand and execute green supply chain practices in retailing.
5. Apply contemporary IT tools and techniques in retailing and logistics management.

Text Books

1. **Rajesh Ray** (2010), "*Supply Chain Management for Retailing*", First Edition, Tata McGraw Hill Education Private Limited, New Delhi

2. **Sunil Chopra and Peter Meindl,** (2015), **"*Supply Chain Management: Strategy, Planning and Operation"*,** 6th Edition, Pearson Higher Education, New Delhi.

References

1. **Ayers, J. B., & Odegaard, M. A.** (2017), "*Retail Supply Chain Management*", Second Edition, CRC Press,USA.
2. **Christopher Martin** *(*2011), "*Logistics and Supply Chain Management"*, 4th Edition, Pearson Education, New Delhi.
3. **Robert B. Handfield, Ernest Nichols** (2016), **"*Introduction to Supply Chain Management"*,** 1st Edition, Pearson Education, New Delhi.
4. **David Blanchard** (2010), "*Supply Chain Management Best Practices*", 2nd Edition, Wiley Publications, New Delhi.
5. **Meenal Dhotre** (2010), "*Channel Management and Retail Marketing"*, Revised Edition, Himalaya Publishing House, New Delhi.

Indian Ethos and Business Models

Semester III   **H rs. of Instruction/week : 2T+2P**
20MBMC30E   **No. of credits: 3**

Course Objectives

1. Acquaint the students with Indian Ethos and its relevance to managerial decision making.
2. Familiarize the sources of Indian Ethos in Management and apply the same in business
3. Create awareness regarding Indian culture and value systems and design business models.

Unit I Indian Ethos and Values   12 hrs

Indian Ethos: -Need, **History*,** Relevance, Principles followed by Indian Organizations, Role of Indian Ethos in Managerial Practices in India, Indian perspective of values for managers*, Secular vs. Spiritual values in management

Unit II Sources of Indian Ethos in Management   12 hrs

Management Lessons from scriptures: Management lessons from Vedas, Mahabharata, Kautilya's Arthashastra, Bible and Quran, Indian Heritage in Business Management, **Indian Management vs Western Management *.**

Unit III Work Ethos and Values   12 hrs

Work Ethos and Values- Work Ethos : Meaning, Levels and Dimensions, Factors responsible for poor work ethos, Values for Indian Managers, **Importance of Value System in Work Culture***, Impact of Values on Stakeholders: Employees, Customers, Government, Competitors and Society.

Unit IV Indian Systems of Learning   12 hrs
Indian Systems of Learning: Gurukul System of Learning-Meaning, Features, Advantages and Disadvantages; Modern System of Learning- Meaning, Features, Advantages and Disadvantages; Self-Management-Personal growth and Lessons from Ancient Indian Education System; **Personality Development***-Meaning, Determinants, Indian Ethos and Personality Development.

Unit V Business Models   12 hrs
Business Models : Indian Models in Entrepreneurship:, India's start up revolution–Trends, Imperatives, benefits; the players involved in the ecosystem, Business Incubators-Rural entrepreneurship, social entrepreneurship, women entrepreneur.
Indian thoughts, Guna Theory, Karma: Meaning, Importance of Karma to managers, Nishkama Karma, Laws of Karma, Corporate Karma- Meaning, Methodology, Guidelines for good Corporate Karma; **Stress at Workplace***.
Joint Hindu Family Business: Leadership Qualities of Karta, **Models of Motivation**[*] and Leadership in Indian thoughts- Case studies of Indian Family Business – Success and Failures.
 (*-Self Study Portion)

Course Outcomes:
On successful completion of the course, the students will be able to:
1. Identify the importance of Indian Ethos in Management
2. Acquire knowledge on Indian culture and value systems
3. Enhance the Scope of applying value based principles and ethos in business operations
4. Design ethically sustainable Business Models
5. Evaluate critically the success and failures of Indian Family Business houses.

Text Books:
1. **B.K. Nair,K.C.R. Raja,S. Balachandran** (2008), '*Ethics, Indian Ethos and Management*' Second Edition, Shroff Publishers & Distributers Pvt. Ltd, New Delhi
2. **Tushar Agarwal, Nidhi Chandorkar** (2017), '*Indian Ethos in Management*', Himalaya Publishing House, New Delhi

References:
1. **Alexander Osterwalder, Yves Pigneur** (2010), '*Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*', John Wiley and Sons, US
2. **Krishna Saigal**(2003), '*Vedic Management- The Dharmic and Yogic Way'*, Gyan Publishing House, New Delhi
3. **Kumardatt A. Ganjre, Prafulla A. Pawar & Laxman N. Renapure**(2013), '*Indian Ethos: Modern management Mantras'*, Himalaya Publishing House, New Delhi
4. **Mohan D** (2013), '*Management Dynamics and Indian* **Ethos'**, Shroff Publishers & Distributers Pvt. Ltd, New Delhi
5. **R Nandagopal and Ajith Sankar R N** (2010), '*Indian Ethos And Values In Management'*, Tata Mc Graw Hill Education Pvt Ltd, New Delhi.
6. **Rajen. K. Gupta** (2015), '*Towards the Optimal Organisation: Indian Culture and Management'*, Excel Books, New Delhi.

Data Sciences with R Programming

Semester IV   Hrs. of Instruction /week:2T+2P
20MBMC31S   No. of credits   :3

Objectives
1. Describe the Data Science Process and components interactions..
2. Work effectively and synergically in teams on data science projects.
3. Reason around ethical and privacy issues in data science conduct and apply ethical practices.

Unit I   Data Science and Business Strategy   12 hrs
Introduction: Concept, Big Data and Data Science hype, Datafication, Implications, Risks,
Business Strategy: Data and Data Science Capability as a Strategic Asset , Data-Analytic Thinking,
Achieving Sustainable Competitive Advantage with Data Science*.

Unit II   Data Analytics and Big Data   12 hrs
Exploratory Data Analysis and the Data Science Process - Basic tools (plots, graphs and summary statistics) of EDA, Philosophy of EDA, The Data Science Process , Case Study: Real Direct (online real estate firm).
Big Data: Introduction, Distributed File System, Importance, Four Vs, Analytics, **Applications***. Algorithms using map reduce.

Unit III   Machine Learning Algorithms   12 hrs
Basic Machine Learning Algorithms- Linear Regression, k-Nearest Neighbors (k-NN), k-means
Usage in Applications- Filtering Spam, Naive Bayes, Data Wrangling: APIs and **Other tools for scrapping the Web*.**

Unit IV   R Programming for Data Science   12 hrs
Basics & Essentials: Basics computations, Data types and objects, control structures, functions, Basic Graphs in EDA.
Manipulation & Predictive modeling: Grammar of Data Manipulation, Feature Engineering-Extraction and classification, **Liner Regression***.

Unit V   Business Analytics Applications   12 hrs
Business Analytics Applications -Online Marketing and Advertising*, Financial Services and Risk Analytics, Operational and Service Analytics
Mining Social-Network Graphs- Social networks as graphs, Clustering, Direct discovery of communities, Partitioning, Neighborhood properties.
*- Self Study Portion

 Course outcomes:
 On the completion of the course students will be able to
1. Exhibit knowledge on big data analytics with statistical analysis.
2. Demonstrate the ability to think critically in making decisions based on data analytics
3. Apply broad range of methods based on statistics and informatics and can use these for data management, analysis and problem solving and have experience in deriving theoretical properties of methods involved in Data Science
4. Translate data into clear, actionable insights using R programming
5. Equip for implementation/modification of methods involved in Data Science and demonstrate business analytics applications that facilitate the effective presentation of analysis results

Text Books

1. **Cathy O'Neil and Rachel Schutt** (2014), "*Doing Data Science, Straight Talk From The Frontline"*, 1st edition, O'Reilly.
2. **Roger D.Peng** (2012), "*R Programming For Data Science"*, 1st edition, LULU Press

References

1. **Field Cady** (2017), '*The Data Science Handbook'*, 1st edition, John Wiley & Sons
2. **Foster Provost, Tom Fawcett** (2013), '*Data Science for Business: What You Need to Know about Data Mining and Data-Analytic Thinking'*, 1st edition, O'Reilly Media, Inc. Canada
3. **Mayer-Schönberger, V., & Cukier, K.** (2013). '*Big data: A revolution that will transform how we live, work, and think'.* 1st edition, Houghton Mifflin Harcourt.
4. **Mike Loukides** (2011) , '*What Is Data Science?',* 1st edition, O'Reilly Media, Inc. Canada
5. **Roger D.Peng** (2016), '*Exploratory Data Analysis With R'*, 1st edition, Lean Publisher.
6. **Thomas Mailund** (2017), '*Beginning Data Science in R: Data Analysis, Visualization, and Modelling for the Data Scientist'*, 1st edition, Apress, New Delhi

Research Based Project

Semester IV   **Hrs.of Instruction /week:15P**
20MBMC32   **No. of credits   :6**

The Major Project to be pursued and completed in the fourth semester on the areas of specialisation, valued both internally and externally.

This project carries 100 marks (CIA) and 100 marks (CE).