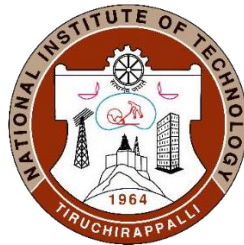# NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI - 620 015

M.B.A. DEGREE
(TRIMESTER PATTERN)

CURRICULUM AND SYLLABUS FOR
MASTER OF BUSINESS ADMINISTRATION
(2023 - 2024 Onwards)

DEPARTMENT OF MANAGEMENT STUDIES

DEPARTMENT OF MANAGEMENT STUDIES
MBA PROGRAMME

Programme Educational Objectives

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

Programme Outcomes

1. **Scholarship of Knowledge -** Possess in-depth knowledge of business management and entrepreneurship from global perspective.
2. **Critical Thinking -** Understand complex management issues, apply independent judgement for synthesising information to make intellectual decision.
3. **Problem Solving -** Enable lateral thinking to conceptualise and solve management challenges, evaluate a wide range of potential and feasible solutions.
4. **Decision Making -** Demonstrate better decision - making ability, individually and as a member of a team.
5. **Research Skill -** Cultivate business research skills by applying appropriate research methodologies, techniques and tools.

6. **Business Analysis -** Learn and apply the analytical skills to solve business dilemmas.
7. **Collaborative and Multidisciplinary Learning -** Possess knowledge on group dynamics, recognise opportunities and contribute to collaborative - multidisciplinary learning.
8. **Communication -** Communicate effectually with all business stakeholders, to create persuasive presentations and reports with appropriate standards.
9. **Lifelong Learning Skill -** Respond to challenges of an ever-changing business environment with constant update of domain information and knowledge.
10. **Ethical Practices and Social Responsibility -** Acquire professional code of conduct and intellectual integrity by understanding the professional and business ethics to contribute to the   sustainable development of the nation.

NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI
DEPARTMENT OF MANAGEMENT STUDIES

MBA PROGRAMME 2023-24

(Total minimum credits required for completing the Two years full time regular MBA course is 80.
Each Course carries 2 credits. Each Course will be covered in 30 sessions).

Trimester - I

Sl. No	Course Code	Course of Study	L	T	P	C
1	MB711	Organizational Structure and Design	3	0	0	2
2	MB712	Legal Aspects of Business	3	0	0	2
3	MB713	Business Statistics	3	0	0	2
4	MB714	Financial Reporting and Analysis	2	1	0	2
5	MB715	Marketing Management - Concepts and Design	3	0	0	2
6	MB716	Business Communication	3	0	0	2
7	MB717	Microeconomics	3	0	0	2
		Total	**20**	**1**	**0**	**14**

Trimester - II

Sl. No	Course Code	Course of Study	L	T	P	C
1	MB721	Managing People in Organization	3	0	0	2
2	MB722	Information Management	3	0	0	2
3	MB723	Production and Operations Management	3	0	0	2
4	MB724	Cost and Management Accounting	2	1	0	2
5	MB725	Marketing Management - Planning and Control	3	0	0	2
6	MB726	Macro Economics	3	0	0	2
7	MB727	Indian Ethos and Business Ethics	3	0	0	2
		Total	**20**	**1**	**0**	**14**

Trimester - III

Sl. No	Course Code	Course of Study	L	T	P	C
1	MB731	Human Resource Management	3	0	0	2
2	MB732	Corporate Information Strategy and Management	3	0	0	2
3	MB733	Operations Research	3	0	0	2
4	MB734	Financial Management	3	0	0	2
5	MB735	Business Research Methods	3	0	0	2
6		Elective - 1	3	0	0	2
7		Elective - 2	3	0	0	2
		Total	**21**	**0**	**0**	**14**

Trimester1 - IV

Sl. No	Course Code	Course of Study	L	T	P	C
1	MB741	Strategic Management	3	0	0	2
2	MB742	Summer Project*	0	0	4	4
3		Elective - 3	3	0	0	2
4		Elective - 4	3	0	0	2
5		Elective - 5	3	0	0	2
6		Elective - 6	3	0	0	2
7		Elective - 7	3	0	0	2
		Total	**18**	**0**	**4**	**16**

* Students take up Summer Project for 8 weeks at the end of First year during the vacation.

Trimester - V

Sl. No	Course Code	Course of Study	L	T	P	C
1	MB751	Project Management	3	0	0	2
2	MB752	Strategic Total Quality Management	3	0	0	2
3		Elective - 8	3	0	0	2
4		Elective - 9	3	0	0	2
5		Elective - 10	3	0	0	2
6		Elective - 11	3	0	0	2
		Total	**18**	**0**	**0**	**12**

Trimester - VI

Sl. No	Course Code	Course of Study	L	T	P	C
1	MB761	Entrepreneurship Development	3	0	0	2
2		Elective - 12	3	0	0	2
3		Elective - 13	3	0	0	2
4		Elective - 14	3	0	0	2
5		Elective - 15	3	0	0	2
		Total	**15**	**0**	**0**	**10**

L: Lecture | T: Tutorial | P: Practical | C: Credits.

NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI
DEPARTMENT OF MANAGEMENT STUDIES
MBA PROGRAMME 2023-24
List of Elective Courses

S.No.	Course Code	Name of the Elective Course	L	T	P	C
1	MB811	Talent Management	3	0	0	2
2	MB812	Training and Development	3	0	0	2
3	MB813	Interpersonal Effectiveness	3	0	0	2
4	MB814	Compensation and Benefits	3	0	0	2
5	MB815	Counselling in the workplace	3	0	0	2
6	MB816	Change Management	3	0	0	2
7	MB817	Strategic Human Resource Development	3	0	0	2
8	MB818	Negotiation and Conflict Management	3	0	0	2
9	MB819	Industrial Psychology	3	0	0	2
10	MB820	HR Analytics	3	0	0	2
11	MB821	Industrial Relations and Labour Laws	3	0	0	2
12	MB822	International Human Resource Management	3	0	0	2
13	MB823	Knowledge Management and Innovation	3	0	0	2
14	MB824	Strategic Brand Management	3	0	0	2
15	MB825	Retail Management	3	0	0	2
16	MB826	Consumer Behaviour	3	0	0	2
17	MB827	Services Marketing	3	0	0	2
18	MB828	Customer Relationship Management	3	0	0	2
19	MB829	Marketing Research	3	0	0	2
20	MB830	Advertising Management	3	0	0	2
21	MB831	Sales Management	3	0	0	2
22	MB832	Strategic Marketing	3	0	0	2
23	MB833	Marketing Metrics	3	0	0	2
24	MB834	Analytics for Strategic market planning	3	0	0	2
25	MB835	Analytics for Strategic market Implementation	3	0	0	2
26	MB836	Business Market Management	3	0	0	2
27	MB837	International Marketing	3	0	0	2
28	MB838	Digital Marketing	3	0	0	2
29	MB839	Neuro Marketing	3	0	0	2
30	MB840	Business Analysis and ITC in Marketing and Retail	3	0	2	2
31	MB841	Financial Institution and Services	3	0	0	2
32	MB842	Investment Security Analysis and Portfolio Management	3	0	0	2
33	MB843	Financial Derivatives	3	0	0	2
34	MB844	Investment Banking	3	0	0	2
35	MB845	Asset Based Financing	3	0	0	2
36	MB846	Behavioral Finance	3	0	0	2
37	MB847	Personal Finance	3	0	0	2
38	MB848	Advanced Corporate Finance	3	0	0	2

39	MB849	Insurance and Pension Schemes	3	0	0	2
40	MB850	Strategic cost Accounting and Management control	3	0	0	2
41	MB851	Tax Laws and Tax Planning	3	0	0	2
42	MB852	Treasury Management	3	0	0	2
43	MB853	International Finance	3	0	0	2
44	MB854	Corporate Valuation	3	0	0	2
45	MB855	Financial Risk Analytics	3	0	0	2
46	MB856	Business Analysis and ITC in Banking and Financial Services	3	0	0	2
47	MB857	Production Planning and Control	3	0	0	2
48	MB858	Logistics Management	3	0	0	2
49	MB859	Supply Chain Management	3	0	0	2
50	MB860	Services Operation Management	3	0	0	2
51	MB861	Advanced Materials Management	3	0	0	2
52	MB862	Advanced Operation Research	3	0	0	2
53	MB863	Technology Forecasting	3	0	0	2
54	MB864	Manufacturing Strategy	3	0	0	2
55	MB865	Supply Chain Analytics	3	0	0	2
56	MB866	Lean Manufacturing	3	0	0	2
57	MB867	Innovation and R&D Management	3	0	0	2
58	MB868	Business Analysis and ITC in Manufacturing	3	0	0	2
59	MB869	Technology Management	3	0	0	2
60	MB870	Introduction to Business Analysis and IT Consulting	3	0	0	2
61	MB871	Systems Analysis and Design	3	0	0	2
62	MB872	Software Project Management	3	0	0	2
63	MB873	Software Quality Management	3	0	0	2
64	MB874	Introduction to Business Analytics	3	0	0	2
65	MB875	Basic Data Analytics	3	0	0	2
66	MB876	Big Data Analytics and Data Science	3	0	0	2
67	MB877	Advanced Data Analytics	3	0	0	2
68	MB878	Machine Learning Techniques	3	0	0	2
69	MB879	Advanced Machine Learning Techniques	3	0	0	2
70	MB880	Data Mining Techniques	3	0	0	2
71	MB881	Google Analytics	3	0	0	2
72	MB882	Text Analytics	3	0	0	2
73	MB883	Digital Analytics	3	0	0	2
74	MB884	Data Analytics Software Lab	3	0	0	2
75	MB885	Game Theory and Applications	3	0	0	2
76	MB886	Course of Independent Study	3	0	0	2
77	MB887	Intellectual Property rights Management	3	0	0	2
78	MB888	Information and Internet Economics	3	0	0	2
79	MB889	International Business and Strategy	3	0	0	2
80	MB890	Design Thinking and Innovation	3	0	0	2

Syllabus for the Core Course

MB711 ORGANIZATIONAL STRUCTURE AND DESIGN

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

Course Content

Unit I Introduction to Organizations and organization theory
Organisations as systems - Dimensions of organisational Design - The evolution of organisational Theory and Design - Role of organization theory and design.

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

Unit III Open system design elements
The environmental domains - inter organisational relationships - organisational level manufacturing technology - organisational level service technology - Diversity Equity and Inclusion in Organizational Design.

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

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

Course Outcomes
- Understand the key concepts of organizations and organization theory and their relevance in modern management practices.
- Analyse the relationship between organizational purpose, strategy and effectiveness, and the fundamental principles of organizational design.
- Evaluate the key elements of open system design, including the environmental domains, inter - organizational relationships, and organizational technology.

- Assess organizational transformation, including life cycle stages, models of organizational growth and decline, and strategies for organizational control.
- Apply knowledge of the dynamic processes involved in managing organizations, including the role of culture, innovation, and technology, to contemporary organization design.

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

MB712 LEGAL ASPECTS OF BUSINESS

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

Course Content

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

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

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

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

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

Course Outcomes
- Students will be able to gain in - depth knowledge of the fundamental legal principles behind contractual agreements in the Indian Contract Act.
- Students will be able to delve into the sections and subsections of the Sale of Goods Act.
- Students will be able to develop a basic knowledge of the provisions of the Companies Act.
- Students will be able to critically assess and interpret the Consumer Protection Act and FEMA provisions.
- Students will be able to develop an understanding of the Information Technology Act and RTI Act.

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

MB713 BUSINESS STATISTICS

Course Objectives

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

Course Content

Unit I Inferential and Descriptive statistics
Introduction to Statistics - Measures of Central Tendency - Measures of Dispersion in Frequency Distribution.

Unit II Probability Theory

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

Unit III Sampling Distribution

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

Unit IV Hypotheses Testing

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

Unit V Non - Parametric methods

Non - Parametric methods: Median Test - Kolmogorov - Smirnov Test - Mann - Whitney U - Test - Wilcoxon matched pair T - Test - Kruskal Wallis Test.

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

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

MB714 FINANCIAL REPORTING AND ANALYSIS

Course Objectives
- To provide students with a basic understanding of financial accounting concepts and principles, as well as their practical application.
- The course aims to introduce students to the mechanism of double-entry bookkeeping, inventory accounting, and depreciation accounting.

- To enable students to critically analyse corporate financial statements.
- The students should be able to apply their knowledge of financial accounting to analyze and interpret financial statements and make informed business decisions.

Course Content

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

Unit II Finalization of Accounts
Journalizing adjustment entries - Preparing Adjusted Trial Balance - Passing the closing or transfer entries - Preparing financial statements - Profit & Loss account - Balance sheet preparation.

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

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

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

Course Outcomes:
By the end of this course, students will be able to:
- Understand the role and importance of financial accounting in business
- Apply the accounting equation and double-entry bookkeeping to record business transactions
- Analyse and interpret financial statements, including the balance sheet, income statement, and cash flow statement
- Understand the Goods and Services Tax (GST) in India and its impact on financial accounting
- Apply their knowledge of financial accounting to make informed business decisions.

Text and reference books
1. Maheshwari S N and Maheshwari S K, "An Introduction to Accountancy", Vikas Publishing House, 9th Edition, (2007).
2. James M. Wahlen, Stephen P. Baginski, and Mark Bradshaw, Financial Reporting, Financial Statement Analysis, and Valuation: A Strategic Perspective by South-Western College Pub; 8th edition (2018).

3. Tulsian, P. C., and Tulsian, Bharat. (2020), Financial Accounting. Pearson Education India.
4. Narayanaswamy, R. (2020), Financial Accounting: A Managerial Perspective, PHI Learning Private Limited.
5. Ashok Banerjee and Sudipta Karmakar, Fundamentals of Financial Accounting, Oxford University Press, 4th Edition, 2019.
6. Ramachandran N and Kakani, Ram Kumar, "Financial Accounting for Management", Tata McGraw Hill, 2nd Edition, (2008).
7. Maheshwari S.N. and Maheshwari S.K., "Advanced Accountancy", Vikas Publishing House, 12th Edition, (2022).
8. Gupta, R. K. (2020), Financial Accounting for Management, PHI Learning Private Limited.

MB715 MARKETING MANAGEMENT - CONCEPTS AND DESIGN

Course Objectives
- To make the students understand the concepts of marketing in theory and practice.
- To make the students understand consumer behaviour.
- To explore the strategies for new product development.
- To develop the analytical perspectives for students on effective marketing decisions.

Course Content

Unit I Introduction
Core concepts of Marketing - Need, Want, Markets, Product vs Services - Evolution of Marketing Concept - Scanning the Environment - Importance of Marketing.

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

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

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

Unit V Marketing Strategies
Marketing Planning Process - Marketing Strategies for leaders, followers and challengers - Marketing interface with other functional areas - Global Marketing - Trends in Marketing - Digital Marketing strategies - Relevant case studies.

Course Outcomes
- The learner will be able to understand the marketing concepts and their applications.
- Students would be able to appraise the buyer behaviour.

- Students will be able to create marketing strategies.
- Students would be able to develop capability to make various decisions including new Product decisions.

Text and reference books
1. Kotler, Philip and Gary Armstrong, Principles of Marketing, 17th Edition. Pearson, (2019).
2. Philip Kotler, Keller, Koshy, Jha, Marketing Management, 15th edition, Pearson, New Delhi, (2015).
3. Ramaswamy and Namakumari, Marketing Management, TMG, NewDelhi.
4. Rajan Saxena, Marketing Management, Tata McGraw Hill, New Delhi.
5. R.L. Varshney and S.L. Gupta, Marketing Management Indian perspective, Sultan Chand, New Delhi (2004).
6. R.S.N. Pillai and Bagavathi, Modern Marketing, S. Chand, New Delhi.
7. Michael Etzel, Bruce Walker, William Stanton and Ajay Pandit, Marketing, 14th edition, Tata McGraw Hill, New Delhi (2006).
8. Masterson, Rosalind and David Pickton. Marketing: An Introduction. Sage Publications, (2014).
9. Panda, Tapan K. Marketing Management: Text and Cases Indian Context. Excel Books India, (2009).

MB716 BUSINESS COMMUNICATION

Course objectives

- To understand the importance of communication and its concepts, goals, and communication networks in business.
- To enhance effective listening and develop techniques for persuasive speaking in personal and professional life.
- To develop strategies for direct and indirect approaches to business messages and use persuasive argumentation in business writing.
- To create skill set for business and professional letter writing.
- To evaluate the essence of technology in communication, including the limitations in making professional presentations.

Course Content

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

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

Unit III Professional Communication

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

Unit IV Interpersonal Communication

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

Unit V Business Communication and Technology

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

Course Outcome:
- The learners will be able to understand the process and concepts of Business communication.
- To comprehend the importance of effective listening and develop persuasive techniques for writing and speaking skills.
- The learners can communicate information in a simple, clear, concise, and precise form for the smooth functioning of the organization.
- The learners will be able to manage change through effective interpersonal communication.
- Learners can apply skills by using technology and communicate effectively in different business situations.

Text and Reference Books

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

MB717 MICROECONOMICS

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

Course Content

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

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

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

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

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

Course Outcomes
Upon successful completion of the course a student will be able to
- Understand and apply the concepts of Microeconomics.
- Describe and apply demand and supply concepts and its elasticities in the contexts of corporate and government levels.
- Develop the relationship between Production, Cost, Volume and Profit functions and its applications.
- Relate the various types of competitions in the market structure in the real world.
- Apply various pricing and capital budgeting techniques in project evaluation.

Text and reference books
1. Robert S. Pindyck and Daniel L. Rubinfeld, Micro Economics, Pearson education, 5thEdn.
2. H. L. Ahuja, Principles of Microeconomics, S.Chand, (2016).
3. D.N. Dwivedi, "Microeconomic Theory and Applications", Vikas Publications, 3rd Edition, (2016).
4. H. L. Ahuja, "Modern Microeconomics Theory and Applications", S.Chand, 19e, (2022).
5. Paul G Keat, Philip K.Y.Young, "Managerial Economics". Pearson Education, 5edition, (2006).
6. David Shapiro, Daniel Macdonald, and Steven A, "Principles of Microeconomics", Rice University, 3edition, (2022).

MB721 MANAGING PEOPLE IN ORGANIZATION

Course Objectives
- To learn how people, behave in the context of an organization.
- To understand how employee's perspectives, facilitate/hinder organizations growth.
- To comprehend the group behaviour and its implications on organizational performance.
- To apply the concepts and theories in addressing organizational issues and problems.

Course Content

Unit I Introduction
Definition of Organizational Behaviour (OB) - Disciplines that contribute to the OB field - Conceptual framework - Contemporary challenges and opportunities in managing people - Organizational behaviour models.

Unit II Individual dimensions of OB - I
Job Attitudes: Components - Measurement - Perception: Attribution Theory - Individual Decision Making - Personality: Determinants - Personality framework - Values in the workplace.

Unit III Individual dimensions of OB - II
Learning: Theories of learning - Shaping behaviour - Motivation - early theories of motivation - contemporary theories of motivation - Motivation and job design - Alternative work arrangements.

Unit IV Group dimensions of OB
Group behaviour and work teams - Group decision Making - Communication - Leadership: Styles - Theories of leadership: Trait, Behavioural, Contingency and contemporary theories - Power and Politics.

Unit V Organizational dimension of OB
Organizational culture - creating and sustaining culture - Organizational change - managing change - approaches - Stress: Causes and Effects - Coping strategies - Organizational Development.

Course Outcomes
- Students will be able to demonstrate an understanding of core knowledge in managing people.
- Students will be able to comprehend the individual differences at workplace.
- Students will be understanding the implications of group behaviour at workplace.
- Students will be able to apply appropriate concepts and theories to manage people.

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

MB722 INFORMATION MANAGEMENT

Course Objectives
- To provide a comprehensive overview of information systems by connecting MIS and business performance.
- To provide knowledge on System development and applications in business environment.

Course Content

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

Unit II IT Infrastructure and Enterprise Applications
Business Hardware and Software - Software as service - Enterprise Resource Planning - Supply Chain Management Systems - Customer Relationship Management Systems - Expert System - Block Chain Technology in Business - E - Business and E - Commerce applications.

Unit III Systems Analysis and Design
Overview of system development - System Development Life Cycle - Prototyping - Structuring system process requirements - Structuring system logic requirements - Structuring system data requirements.

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

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

Course Outcomes
- To understand the different forms of Information systems in business perspective.
- To understand IT infrastructure and its applications.
- To know system development methodologies and tools.
- To understand business in systems perspectives.

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

MB723 PRODUCTION AND OPERATIONS MANAGEMENT

Course Objectives
- To introduce students to the concepts of production and operations.
- To enable students to understand the importance of management/planning in the production and operations.
- To develop the ability to identify problems relating to operations in a production environment.

Course Content

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

Unit II Facility Location Planning
Plant location: Factors to be considered - Multi Plant Location - Evaluation of Factors using Rations plan and Cost Analysis - Plant location trends. Plant Layout: Types of Layouts.

Unit III Job Aspects and Work Measurement
Introduction to Job Design - Motion Study - Job Evaluation - Job Evaluation Techniques - Work Measurement: Time Study - Work Sampling.

Unit IV Materials Management
Introduction to Materials Management - Purchasing and Warehousing Functions - Vendor Development and Rating. Value Analysis.

Unit V Quality Control
Introduction to Quality control - objectives and scope of Quality Control - Control Charts - Inspection overview - Overview Total Quality management and its importance.

Course Outcomes
- Students get an understanding of the "Operations" domain in management.
- Students gain the skill to apply basic quantitative models for problems in business planning and operations.
- Students would be able to prepare basic production reports.

Text and reference books
1. William J Stevenson, Operations Management, McGraw Hill Education, 11th Indian Edition.
2. B. Mahadevan, Operations Management: Theory and Practice, Pearson, Third Edition.

MB724 COST AND MANAGEMENT ACCOUNTING

Course Objectives

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

Course Content

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

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

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

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

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

Course Outcomes
- Students will be able to explain the advanced approaches of Cost Accounting.
- Students will be able to prepare a cost sheet and compare alternatives using costing methods.
- Students will be able to develop proper financial control with the use of costing techniques and budgetary control systems.

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

MB725 MARKETING MANAGEMENT - PLANNING AND CONTROL

Course Objectives
- To enhance knowledge on the 4Ps of the Marketing.
- To develop managerial decisions on designing, implementing and monitoring the marketing mix elements of marketing functions among students.

Course Content

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

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

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

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

Unit V Marketing Dashboard
Organizing and Controlling the Marketing Function - The Business and Marketing Plan - The Marketing Audit - Marketing Arithmetic for Business Analysis.

Course Outcomes
- Students will be able to identify the 4Ps.
- Students will be able to take managerial decisions on designing - implementing and monitoring the marketing mix elements of marketing functions.

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

MB726 MACROECONOMICS

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

Course Content

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

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

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

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

Unit V Sustainable Development

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

Course Outcomes

Upon successful completion of the course a student will be able to

- Explain the concepts of Macroeconomics and its interrelations with Microeconomics.
- Associate the current economic phenomenon with existing theory and put their views on contemporary economic issues.
- Apply the principle of Macroeconomics in explaining the behaviour of Macroeconomic variables at corporate, sectoral, national as well as global levels.
- Extend the understanding and applications of Macroeconomic concepts and policy.
- Relate the significance of economic development and sustainability.

Text and reference Books

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

MB727 INDIAN ETHOS AND BUSINESS ETHICS

Course Objectives

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

Course Content

Unit I Indian Ethos

Indian Ethos - Features and Importance - Ideas, Thoughts and Role of Indian Ethos for effective Management - Business Ethos and principles practiced by Indian Companies - The value oriented holistic Management - Thirukkural in Management (Managing, Leadership, Decision Making) - Social System - Social Structure - Ethnomethodology.

Unit II Indian Value System

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

Unit III Professional and Organizational ethics

Professional ethics - Virtuous Leadership - Organisational culture - Professional Behaviour - Institutionalizing Business Ethics - Ethical decision making - the Virtue theory - the Casuist theory - Teleological and deontological ethics - Social Intelligence - Relevant case studies.

Unit IV Introduction to Business Ethics

The nature of business ethics - Ethical Relativism - Business Ethics in India: Ancient and Modern perspectives, Global Scenario - Ethical issues in Digital business environment - Business Ethics in the multicultural context - Relevant case studies.

Unit V Ethical Principles and CSR

Components of the ethical programmes - Functions of ethical officer - Organizational isomorphism - The principle of proportionality - Human dignity - Corporate Social Responsibility and Business ethics - Value creation to stakeholders.

Course outcomes

Upon completing the course requirements, the students are able to
- Understand the theoretical underpinnings of Indian ethos for managing and decision making.
- Leaner will get an exposure to the professional and business ethics.
- Leaner will get the knowledge and understanding of Indian Value system.
- Describe and demonstrate the significance of ethical issues and behavior in business.
- Leaner will get the strategies of value creation to stakeholders.

Text and reference books

1. Bajpai, B. L.Indian Ethos and Modern Management: Amalgam of the Best of the Ideas from the East and the West, New Royal Book publisher (2008).
2. Sinha, Zaware Nitin, Barbate and Thite, Indian Ethos and Business Ethics, Nirali Prakashan publications, 2nd Edition (2021).
3. Velasquez, M. G., Business ethics: Concepts and cases, Pearson Education South Asia Pvt Ltd, 7th Edition (2018).
4. S, Pallavi, Management concepts in Thirukkural, Mayas Publication, 1st Edition (2018).
5. Mike W. Martin, Roland Schinzinger, Ethics in Engineering, McGraw-Hill Education, 2005.
6. Hartman, L. P., and DesJardins, J. R., Business ethics: Decision making for personal integrity & social responsibility, McGraw Hill Education, 5th Edition (2021).
7. Dr. Vishal Saxena, Business Management Ethics & Entrepreneurship, Bharat Law House Pvt. Ltd", 1st Edition (2019).
8. A.C. Fernando, K P Muralidheeran and E K Satheesh, Business Ethics: An Indian Perspective, Pearson Education, 3rd Edition (2019).
9. John, R Boatright, Jeffrey, D Smith, Bibhu, Prasan Patra, Ethics and the Conduct of Business, Pearson Publications, 8th Edition (2017).

MB731 HUMAN RESOURCE MANAGEMENT

Course Objective:

- This course aims to develop skills in strategic HRM, talent acquisition and retention, effective HR policies, diversity and inclusion, and continuous learning.
- It enables students to align HR policies with organizational goals for sustainable competitive advantage, attract and retain high-performing employees, design and implement policies that promote employee well-being.
- To align with organizational values, create an inclusive workplace culture, and stay updated with current HR trends and best practices to adapt to changing organizational needs.

Course Content

Unit I Introduction to HRM

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

Unit II Pre-selection and selection process

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

Unit III HRD Development

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

Unit IV Evaluation and compensation

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

Unit V Industrial Relations

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

Course outcomes
- The course aims to develop skills to align HR policies with organizational goals, create an inclusive workplace culture, and stay updated with current HR trends.
- Students will learn about pre-selection, HRD, evaluation, compensation, and industrial relations, and gain a comprehensive understanding of HRM.

Text Books and References:
1. Gary Dessler , Human resources Management, PHI, New Delhi.
2. K. Ashwathappa , Human Resources and Personal Management Text & Cases, Tata McGraw Hill.

MB732 CORPORATE INFORMATION STRATEGY AND MANAGEMENT

Course Objectives
- The course provides a comprehensive knowledge and understanding of how IT is linked with business strategy and functional strategies.
- The course explains strategies involved in IT leadership and IT project management.
- The course provides an idea about IT outsourcing.

Course Content

Unit I Business Impacts of IT
Emerging Digital Economy - growth and opportunities in Information economy - IT and strategy - Understanding the forces - conducting a strategy audit - assessing IT impact and alignment - IT and organisation - Understanding Business Networks - Designing Hybrid Governance - Building collaborative community.

Unit II Managing Infrastructure and Operations
Basic components of Internetworking Infrastructure - Rise of Internetworking and its businessimplications - Assuring reliable and secure IT services - New service models - Managing risk through incremental outsourcing with service providers and Legacies - Managing IT infrastructure assets.

Unit III IT Leadership
Organizational issues in the control of IT activities - Drivers toward user dominance - Driverstoward a centralized IT structure - IT leadership andManagement of budgets - Cause for outsourcing - when to outsource - structuring the alliance - Managing the alliance.

Unit IV Managing portfolio of IT projects
Sources of implementation risk - Project categories and Degree of risk - Project management - A contingency approach - Evaluating strategic benefits of IT - Cases.

Unit V Managing Global Information systems
International information system architecture - Global strategies and Business organization, Technology challenges of global systems, Solution deployment - Contract management - Socio - cultural aspects of managing IS in organizations.

Course Outcomes

- Students will be able to create a proper IT strategy implementation framework.
- Students will be able to decode the role of IT in business model.
- Students will be able to understand the IT risks in a project management.

Text and reference books

1. Lynda M Applegate, Robert D Austin and Mcfarlan, Corporate Information Strategy and Management", 7th edition, Tata McGraw Hill.
2. Hanschke, Strategic IT Management, Springer Verlag.
3. Laudon and Laudon, Management Information Systems, 12th Edition, Pearson publishing company, New Delhi.

MB733 OPERATIONS RESEARCH

Course Objectives

- To learn the basics of deterministic optimization methods.
- This module aims to introduce students to the of use quantitative methods and techniques for effective decisions making; model formulation and applications that are used in solving business decision problems.
- To help students arrive at optimal or near - optimal solutions to complex decision - making problems.

Course Content

Unit I Introduction to Linear Programming

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

Unit II Applications of Linear Programming

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

Unit III Transportation and Assignment problems

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

Unit IV Integer programming - Goal programming and Game theory

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

Unit V Queuing Theory - Simulation and Non - Linear Programming

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

Course Outcomes
- Knowledge and understanding - Be able to understand the characteristics of different types of decision - making environments and the appropriate decision - making approaches and tools to be used in each type.
- Cognitive skills (thinking and analysis) - Be able to build and solve Transportation Models and Assignment Models.
- Communication skills (personal and academic) - Be able to design new simple models, like CPM to improve decision - making and develop critical thinking and objective analysis of decision problem.
- Understand and use the mathematical tools that are needed to solve optimization problems.

Text and reference books
1. Hamdy A. Taha, "Operations Research - An introduction" PHI, edition, (2011).
2. J K Sharma, " Operations Research - Theory and Applications", Macmillan Publishers India Ltd., 4th edition, (2010).
3. Thomas M. Cook and Robert A. Russell, 'Introduction to Management Science', Prentice Hall 3rd Edition, (2000).
4. Anderson, D.R., Sweeney, D.J., Williams, T.A. and Martin, K., An Introduction to Management Science: Quantitative Approach to Decision Making, 13th Edition, SouthWestern, (2012).
5. William E. Pinney and Donald B.McWilliams, 'Management Science: An introduction Quantitative Analysis for management', Harper and Row Publishers.

MB734 FINANCIAL MANAGEMENT

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

Course Content

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

Unit II Financial Statement Analysis
Financial statement analysis - Break even analysis - Employment of these concepts for managerial decisions.

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

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

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

Course Outcome
Students will be able to:
- Understand the basic concepts and principles of financial management.
- Analyse financial statements and use break - even analysis to make managerial decisions.
- Evaluate capital budgeting decisions and cost of capital concepts.
- Design capital structure and understand capital structure theories.
- Analyse financing decisions, including operating and financial combined leverages and
  capital markets.
- Understand dividend theories and policies.
- Plan, finance, and manage working capital, including inventory, cash, and receivables
  management.

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

MB735 BUSINESS RESEARCH METHODS

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

Course Content

Unit I Introduction

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

Unit II Research Design and Measurement

Types of Research Design - Exploratory and Causal Research Design - Descriptive and Experimental Design - Validity of Findings - Internal and External Validity - Variables in Research - Measurement and Scaling - Scales and Construction of Instruments - Validity and Reliability of Instruments.

Unit III Data Collection

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

Unit IV Data Preparation and Analysis

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

Unit V Report Writing and Ethics in Business Research

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

Course Outcomes

- Students will able to understand research methods, tools and techniques.
- Students would be able to undertake a systematic outlook towards business situations for the purpose of objective decision - making and scientific inquiry to solve organizational problems.
- Students would be able to analyse data and interpret the meaning of data.
- Students would be able to prepare research reports.

Text and reference books

1. William G. Zikmund, Barry J. Babin, Jon C Carr and Mitch Griffin, "Business Research Methods", Cengage India, 9th Edition (2013).
2. Naval Bajpai, "Business Research Methods", Pearson, 2nd Edition (2017).
3. H.K Dangi and Shruti Dewen, "Business Research Methods", Cengage Learning, 1st Edition (2016).
4. S N Murthy and U Bhojanna, "Business Research Methods", Excel Books, 3rd Edition (2010).
5. Donald R. Cooper, Pamela S. Schindler and J K Sharma, "Business Research Methods", Tata Mc Graw Hill, 12th Edition (2018).
6. Uma Sekaran and Roger Bougie, "Research methods for Business", Wiley India, 8th Edition, (2019).

MB741 STRATEGIC MANAGEMENT

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

Course Content

Unit I Overview of Strategic Management
Strategy - Elements of Strategy - Strategic Management - Strategic Management Process - Hierarchy of Strategic Intent - Characteristics of Vision and Mission - Evaluation of vision and Mission statement.

Unit II Analysing the Resources and Environment
External environmental analysis - Industrial Organization view - Five - Forces Model - Internal environmental analysis - The Resources Based View - Value Chain Analysis - External and Internal Factor Evaluation matrix - Competitor Profile Matrix.

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

Unit IV Strategic Choice and Activating Strategy
Strategic Analysis - Strategy Formulation Framework - Input Stage Techniques - Matching Stage Techniques - Quantitative strategic planning matrix - Strategy Implementation - Structural, Behavioural, Functional and Operational Implementation.

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

Course Outcomes:
- Students will be able to demonstrate an understanding of the concepts, process and frameworks of strategic management.
- Students will be able to perform environment analysis for business cases.
- Students will be able apply the strategic analysis techniques for examining the business scenarios, choose and implement appropriate strategic alternatives.
- Students will be equipped with familiarity on strategic evaluation and control techniques.

Text and reference Books
1. Azhar Kazmi and Adela Kazmi, "Strategic Management 5th edition, McGraw - Hill Education, (2020).
2. Fred David, Forest David and Meredith David, "Strategic Management: A Competitive Advantage Approach, Concepts and Cases" 17th edition, Pearson (2019).

3. Hitt, Ireland and Hoskission, "Strategic Management: Concepts and Cases, Competitiveness and Globalization", Cengage Learning (2016).
4. Harvard Business Review, "HBR's 10 Must Reads on Strategy", Harvard Business Press (2011).

MB742 SUMMER PROJECT

To apply the learned concepts, tools and techniques to the real time business scenario and to get an exposure to the working of industries and corporate world, All the first-year students have to carry out a Summer Project work in the Industry or Corporate for the period of 8 weeks at the end of First year during the vacation. MB742 SUMMER PROJECT Course will be evaluated during the Fourth Trimester.

MB751 PROJECT MANAGEMENT

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

Course Content

Unit I Project Management Concepts
Project Management - An overview - Project Systems Environment - Project System Lift Cycle.

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

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

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

Unit V Project Environment

Project Management Information System - Value analysis in Project Management - Project organization and Communication - Ecology and biodiversity issues - Environmental Impact assessment.

Course Outcomes

The learner will be able to:
1. Apply selection criteria and select an appropriate project from different options.
2. Write a work breakdown structure for a project and develop a schedule based on it.
3. Use Learned techniques to determine and predict the status of the project.

Text and reference books
1. Prasanna Chandra 'Projects Planning Analysis Selection Implementation andbasic Review, 4 Ed.' Tata McGraw Hill, (1995).
2. Lawrence J. Moore and Edward R. Clayton 'GERT Modeling and Simulation Fundamentals and Application', Petrocelli charter New York, (1997).
3. Ahuja H.N 'Project Management' John Wiley and Sons New York, (1984).

MB752 STRATEGIC TOTAL QUALITY MANAGEMENT

Course Objectives

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

Course Content

Unit I Introduction

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

Unit II Continuous Improvement

Benchmarking - Quality Audits - Quality Costs - Supplier Evaluation - Continuous Process Improvements -5S Concepts - Innovation Management.

Unit III Process Capability

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

Unit IV Business Excellence

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

Unit V HR Aspects
Employee Involvement - Motivation - Teams - Quality circles - Organizational culture -
Building and Sustaining Total Quality Organizations - World class organization -
Introductory aspects of ISO 9000 series Standards and ISO 14000.

Course Outcomes

On completion of the course the learner will

- Understand of the crucial role of quality in business.
- Able to recall the evolution of quality management and quality philosophies and
  practices.
- Should be able to explain the need for strategic total quality management in the present
  business climate.
- Appreciate the importance of HR in Total Quality Management climate.
- Students will have exposure on Quality culture followed in world class companies.

Text and reference books
1. Dale H. Besterfield, Carol Besterfield, Glen H Besterfield and Mary Besterfield
Total Quality Management, Pearson, New Delhi.
2. Subburaj Ramasamy, Total Quality Management, Tata McGraw Hill, New Delhi.
3. Janakiraman and Gopal Total Quality Management, PHI , New Delhi.
4. Juran Gryna and Bingham Quality Control Hand Book McGraw Hill New Delhi.
5. Howard Alan Rosa and David Quality Management Tata McGraw Hill New
Delhi.
6. Poornima M.Charantimath, Total Quality management, Pearson Education, New Delhi.

MB761 ENTREPRENEURSHIP DEVELPOMENT

Course Objectives
- Identify the types of entrepreneurships and explain the difference between
  entrepreneurship and small business management.
- Identify the key steps involved in starting a new business.
- Identify sources of financing and to develop a financial plan.
- Explore the legal issues involved in starting a new business.

Course Content

Unit 1 Introduction
Meaning and importance of entrepreneurship - Role of Entrepreneurs - Classifications of
entrepreneurship - Indian Business climate - Entrepreneurial Mindset - Qualities of an
Entrepreneur - Entrepreneurship Development Cycle.

Unit 2 Venture Creation
New Business Idea Generation - Phases of Venture creation - Recognizing Opportunities and
Generating Ideas, Need for Creativity and Innovation, Entry strategies, Formulating Business
Plan, Marketing plan, Organizational plan and financial plan - Relevant case studies.

Unit 3 Managing Finance
Sources of Finance - Venture Capital - Angel Investment - Crowd Funding - Bootstrapping - Techno Economic Feasibility assessment - Break Even Analysis - Business Plan writing - Preparing Proposal (PPR and DPR) - Business model canvas.

Unit 4 Legal Issues
Firm or Company registration, Types of Business firms - Compliances, Intellectual Property rights - Patents, Trademarks, Copyrights, Trade secrets - Business opportunities in the digital era - Relevant Case Studies. .

Unit 5 Start - up eco system
Startup Ecosystem - Elements of Unicorn and Decacorn - Incentives and Schemes for Startups - Incubator framework - Credit Guarantee Scheme for Startups - Central and State level Schemes and Support - Industrial Estates and Special Economic Zones in India - Development of Women Entrepreneurs.

Course Outcome
- Learner will be able to understand the types of entrepreneurships and importance of creativity.
- Students will be able to develop a business plan.
- Students will be able to analyse the sources of financing.
- Students will become acquainted with legal matters for starting a business.
- Students will be able to know about the schemes and opportunities available.

Text and reference books
1. Vasant Desai, "The Dynamics of Entrepreneurial Development and Management", 6th edition Himalaya Publishing House (2022).
2. Katz , Jerome , "Entrepreneurial Small Business", 7th Edition, Mc Graw Hill (2021).
3. Robert D. Hisrich, Michael P Peters, and Dean A Shepherd, "Entrepreneurship" 10th edition, Mc Graw Hill (2016).
4. Scarborough, N. M., Cornwall, J. R., and Zimmerer, T. "Essentials of entrepreneurship and small business management", Pearson. (2016).
5. Khanka. S.S., "Entrepreneurial Development" S.Chand and Co. Ltd., New Delhi, (2013).
6. Donald F Kuratko, "Entrepreneurship - Theory, Process and Practice", 9th Edition, Cengage Learning, (2014).

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Syllabus for the Elective Course

DoMS NIT Trichy offers elective subjects from the following specializations:
Human Resource Management and Organisational Behaviour, Marketing, Finance, Production and Operation Management, Data Sciences, Information Systems, Technology and Consulting, and General Management.

MB811 TALENT MANAGEMENT

Course Objectives
- To equip the students with the necessary knowledge to manage the talents in the organization.
- To understand the key processes and strategies of talent management.
- To understand about acquisition and retention of the potential talent.
- To understand different talent management strategies for employee development and career enhancement.

Course Content

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

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

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

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

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

Course Outcomes
- Students would be able to understand how to manage talent in an organisation.
- Students would be able to understand different ways of engaging the most valuable resource in the organization.
- It helps the students in understanding the ways in managing the talent in organization as well as managing the talent of an individual.

Text and reference books
1. Lance A. B. and Berger, D. R. "The Talent Management Handbook: Creating Organizational Excellence by Identifying, Developing, and Positioning Your Best People", McGraw Hill (2017).
2. Gowri Joshi and Veena Vohra, "Talent Management", Cengage Learning (2017).
3. Hasan, M., Singh and A. K., Dhamija, "Talent management in India: Challenges and Opportunities", Atlantic Publication (2017).
4. Allan Schweyer, "Talent Management Systems: Best Practices in Technology Solutions for Recruitment, Retention and Workforce Planning", Wiley (2010).

MB812 TRAINING AND DEVELOPMENT

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

Course Content

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

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

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

Unit IV Implementation
Introduction to Implementation - Train the Trainer Programmes - Classroom Delivery of Training - Training Discussion Process Model - Non - classroom Delivering Techniques - Instructional Design of Organizations.

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

Course Outcomes
- Students will be able to develop knowledge about recent approaches to training and development in the organizations.
- Students will be able to critically analyze the training needs of an organization.
- Students will be able to design and develop training module with objectives.
- Students will be able to understand how to execute training program through various methods and techniques.
- Students will be able to evaluate the value of the training program effectively using appropriate techniques.

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

MB813 INTERPERSONAL EFFECTIVENESS

Course Objectives
- To learn about discovering and understanding one's self.
- To relate effectively to others and enhance interpersonal effectiveness.
- To apply the knowledge on interpersonal effectiveness for enhancing workplace relationship
- To comprehend on ethical dilemma in decision making.
- To strive for self - development by means of personal well being.

Course Content

Unit I Discovering the Self
Knowing Oneself - preferences - tastes - likes - dislikes and values - Managing oneself - Self efficacy - Self Esteem - Pillars of Self Esteem - Transaction analysis - Life script analysis - strokes.

Unit II Assessing the Self
Personality assessment - Meyers Briggs Type Indicator - Enneagram - Emotions and Moods - Affective events theory - Emotional Intelligence - Locus of control - Time Management - 4 A's of managing stress.

Unit III Relating to Others
Interpersonal Effectiveness - Managing workplace relationship - Fundamental interpersonal relations orientation analysis - Johari window analysis - Constructive feedback - Adaptability quotient - Persuasion Strategies and Tactics.

Unit IV Ethical and Moral dilemma
Ethical dilemma and moral dilemma - Fair and just approach in decision making - Conflict management process - resolving interpersonal conflict.

Unit V Personal Transformation
Personal development - Process - Steps - Resilience - Theory and Practice - Personal Wellbeing - Eudemonic and hedonic - Power of self-talk - Spirituality and well - being.

Course Outcomes
- Students will be able to demonstrate self - understanding.
- Students will be able to apply self - development techniques to resolve self and interpersonal problems.
- Students will be able to build effective interpersonal/workplace relationship.
- Students will be able to comprehend the necessities of fair and just approach in decision making.
- Students will be able to understand the significance of well - being for personal growth.

Text and reference books
1. Andrew J DuBrin, "Human Relations - Interpersonal Job Oriented Skills" Pearson India (2019).
2. HBR's 10 Must Reads on "Managing People" (2016).
3. Lakshmi Ramarajan, "Building Effective Working relationships". Harvard Business School Module Note. (Revised January 2015).
4. David H. Johnson. "Reaching Out: Interpersonal Effectiveness and Self - Actualization", Pearson Education, (2014).

MB814 COMPENSATION AND BENEFITS

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

Course Content

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

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

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

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

Unit V Legal issues on employee compensation
Collective Bargaining Strategies - Long term settlements - Cases of Productivity Settlements - Exercises on drawing up 12 (3) and 18(1) settlements - Emerging Trends in IR.

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

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

MB815 COUNSELLING IN THE WORKPLACE

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

<div align="center">**Course Content**</div>

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

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

Unit III Counselling Process
Preparation for counselling - Assessing workplace counselling - Contracting for counselling - Introducing counselling in the workplace - Referring and engaging in counselling - and terminating counselling.

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

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

Course Outcomes
- Students will be able to understand the benefits and challenges of workplace counselling and its impact on employee well - being.
- Students will be able to identify different counselling models and their relevance to the workplace and evaluate their effectiveness.
- Students will be able to demonstrate effective counselling skills - including assessment - contracting - and termination of counselling sessions.

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

MB816 CHANGE MANAGEMENT

Course Objectives
- To understand the role of HR strategies in implementing change within an organization.
- To analyse the impact of structural choice and change on an organization's HR policies and practices.
- To evaluate the process of realigning organizational culture and the procedures involved in it.
- To examine the contributions of performance management and HR development in organizational change.
- To explore the relationship between employee relations, compensation, and organizational change.

Course Content

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

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

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

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

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

Course Outcomes
1. Develop an understanding of the importance of HR strategies in implementing change and managing HR policies and practices.
2. Analyse the impact of structural choice and change on HR policies and practices within an organization.
3. Evaluate the process of realigning organizational culture and the procedures involved in it.
4. Examine the contributions of performance management and HR development in organizational change.

5. Analyse the relationship between employee relations, compensation, and organizational change, and the role of employee involvement in promoting change.

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

MB817 STRATEGIC HUMAN RESOURCE DEVELOPMENT

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

Course Content

Unit I Origin of SHRD
Introduction - Changing Environment - Business Complexities - Portfolio - process and structure related strategic responses.

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

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

Unit IV Alignment between strategic response and SHRD system
Portfolio related strategic responses and Strategic HRD system - Process related strategic responses and Strategic HRD system and Structure related strategic responses and Strategic HRD system.

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

Course Outcomes
- Students will be able to demonstrate a clear understanding of the evolution and significance of SHRD and its role in enhancing organizational performance.
- Students will be able to analyse the strategic responses of organizations and develop SHRD strategies that align with organizational objectives.
- Students will be able to design, implement and evaluate SHRD practices that facilitate the development and growth of employees while contributing to organizational success.

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

MB818 NEGOTIATION AND CONFLICT MANAGEMENT

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

Course Content

Unit I Negotiation and Its Components
Definition and concepts of negotiation - Approaches - Negotiator's dilemma - Conflict management - Types - Process - Skills required for effective negotiation - Facets of Personality that affects negotiation and Conflict resolution.

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

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

Unit IV Cultural Differences

Role of culture and power - Negotiation in global context - Cross - cultural negotiation challenges and strategies - Negotiation in virtual and online environments - Negotiation with reference to specific industries.

Unit V Ethics in Negotiation and Conflict Management

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

Course Outcomes
- Students will be able to explain and apply key concepts in negotiation and conflict management.
- Students will be able to understand the significance of individual differences, cross - cultural differences in negotiation and conflict handling.
- Students will be able to analyse and evaluate various negotiation strategies and techniques required for real - world scenarios.

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

MB819 INDUSTRIAL PSYCHOLOGY

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

Course Content

Unit I Principles - practices - and problems

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

Unit II The development of human resources

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

Unit III Organizational Psychology

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

Unit IV Characteristics of the Workforce

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

Unit V Consumer Psychology

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

Course Outcomes

- Develop an understanding of the principles and practices of psychology and their application in the workplace and everyday life.
- Evaluate the development of human resources - including recruitment practices - job analysis - and psychological testing.
- Analyse the role of leadership - motivation - job satisfaction - and organizational culture in organizational psychology.
- Assess the impact of physical working conditions - work schedules - safety and health - and stress management on the workforce.
- Apply knowledge of consumer psychology to understand consumer behavior - advertising - and motivation.

Text and reference books

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

MB820 HUMAN RESOURCE ANALYTICS

Course Objectives

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

Course Content

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

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

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

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

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

Course Outcomes

- Students will be able to demonstrate knowledge on various human resource analytics frameworks and apply the frameworks for real - world business scenarios.
- Students will be able to understand the alignment between human resource process and organization process

- Students will be able to apply the knowledge on various human resource metrics and design/implement human resource scorecard.
- Students will be equipped with hands - on knowledge on application of analytical approaches for examining the contributions of HR function for organization change.

Text and reference books
1. Pratyush Banerjee, Manish Gupta and Jatin Pandey, "Practical Applications of HR Analytics", Sage Publications (2019).
2. Dr Martin Edwards and Kirsten Edwards, "Predictive HR Analytics: Mastering the HR Metric", Kogan Page (2019).
3. Bassi, Laurie Jo, Rob Carpenter, and Dan McMurrer, "HR analytics handbook", Reed Business. (2012).
4. Fitz - Enz, Jac, "The New HR Analytic. Predicting the Economic Value of Your Company's Human Capital Investments". American Management Association (2010).
5. Davenport, Thomas H., Jeanne Harris, and Jeremy Shapiro, "Competing on talent analytics", Harvard business review (2010).

MB821 INDUSTRIAL RELATIONS AND LABOUR LAWS

Course Objectives
- To create an understanding of the concepts of industrial relations and their impact on stakeholders, including employees, employers, and government.
- To analyze the impact of globalization on industrial relations in India and its effects on employment practices and labour laws.
- To evaluate the role of labour welfare and social security measures and responsibilities of welfare officers.
- To explain the key features of labour legislation in India, and various industrial acts and their implications.
- To evaluate the significance of industrial relations legislation in India.

Course Content

Unit I Introduction to Industrial Relations
Industrial relations - An Overview - Perspectives/Approaches to IR - Major stakeholders of IR - Impact of globalization on IR.

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

Unit III Labour Legislations
Normative Labour Legislations - Factories Act - 1948 - Bombay shop and Establishment Act 1948 - The Apprenticeship Act 1961 - Contract Labour (Regulation and Abolition) Act - 1970 - Wage Legislation - Minimum Wages Act 1948 - Payment of wages Act 1936 - Payment of Bonus Act 1965.

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

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

Course Outcomes
- The learners will be able to resolve industrial relations and human relations problems and promote the welfare of industrial labour.
- To analyze the impact of globalization on industrial relations and its effects on employment practices and labour laws.
- The learners will be able to evaluate the labour welfare and social security measures.
- To explain the key features of labour legislation in India, and industrial relations legislation, and its implications.
- To evaluate the significance of social security legislation, various benefits acts, and their impact on employees and employers.

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

MB822 INTERNATIONAL HUMAN RESOURCE MANAGEMENT

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

<div align="center">Course Content</div>

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

Unit II International Staffing

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

Unit III International Human Resource Development

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

Unit IV International Compensation

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

Unit V International Industrial Relations

Global Institutional Context - Key Issues in International Industrial Relations - Trade Unions and International Industrial Relations - Regional Integration - IHRM Trends and Future Challenges - Ethics and Social Responsibility in International HRM.

Course Outcomes
- Students will be able to understand the differences between domestic and international HRM and apply this knowledge in the development of effective IHRM strategies.
- Students will be able to design and implement human resource management practices for global context.
- Students will be able to critically evaluate and apply the knowledge on international industrial relations.

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

MB823 KNOWLEDGE MANAGEMENT AND INNOVATION

Course Objectives
- To understand the concepts of knowledge management and innovation.
- To comprehend the strategic alignment between knowledge management and innovation.
- To make the students understand how knowledge is managed in organizations through framework of people, process and technology.

- To design and implement a knowledge management program for effective knowledge sharing and innovation.

Course Content

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

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

Unit III KM Programme Planning
Analyzing business environment - knowledge audit and analysis - designing KM team - creating KM system blueprint - implementation through tactical approaches (Portal and Community of Practice) - capture - store and sharing - metrics and evaluation.

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

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

Course Outcomes
- Students will be able to understand the drivers of knowledge management and the different levels of innovation.
- Students will be able to identify the strategic alignment between knowledge management and innovation and develop an implementation plan for a knowledge management program.
- Students will be able to analyse the business environment, design a KM team, and develop a KM system blueprint for capturing, storing, and sharing knowledge.

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

MB824 STRATEGIC BRAND MANAGEMENT

Course Objectives
- To make the students to understand the key concepts in Product and Brand Management.
- To explore the various aspects related branding decisions.
- To learn the brand elements and branding strategies.
- To explore the strategies to improve the Brand equity through strategic brand management.

Course Content

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

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

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

Unit IV Branding Decisions
Branding Strategies - Brand Portfolio management - Product line and Brand Extension - Role of Brand ambassadors/Celebrities in Brand Building - Co branding - Private Labels - Brand Rejuvenation.

Unit V Brand Equity
Creating, managing and measuring Brand Equity - Customer Based Brand Equity model - Integrating Marketing Communication to build brand equity - Managing Service Brands - Relevant case studies.

Course Outcomes
- Students would be able to examine the brand concepts in a real - life setting.
- Students will be able to assess the viability of launching a new brand.
- Students would be able to examine the methods for choosing brand elements for a new product or service.
- Students would be able to evaluate the branding decisions and brand building strategies of various brands.

Text and reference books
1. Harsh V Verma, Brand Management - Excel Books, New Delhi (2013).
2. Kevin Lane Keller - "Strategic Brand Management" - Person Education - New Delhi.
3. Subrato Sengupta, Brand Positioning, Tata McGraw Hill, 2nd edition. .
4. S.Ramesh Kumar, "Managing Indian Brands", Vikas publishing House, New Delhi.
5. Ramesh Kumar - Consumer Behaviour and Branding – Pearson, New Delhi (2009).

6. Kapferer, J.N. (2012) The New Strategic Brand Management: Advanced Insights and Strategic Thinking. 5th Ed. Kogan Page.

7. Nirmalaya Kumar and John Benedict, Private Label Strategy, Harvard Business Press, Boston.

8. Jean Noel Kapferer, "Strategic Brand Management", Global Business Press, New Delhi (2012).

9. Daniel Lehman and Rusell Winer, "Product Management", Tata McGraw Hill.

MB825 RETAIL MANAGEMENT

Course Objectives

- The course aims to introduce the participants to the organized retail industry and to provide them with an overview of the retail environment and the real - life exposure with case studies from international retailers.
- The course enables students to learn the retail and supply chain strategies.

Course Content

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

Unit II Consumer Behaviour in the retail context
Buying decision process and its implication to retailing - influence of group andindividual factors. Customer shopping behaviour Customer service satisfaction. Retail planning process - Factors to consider - Preparing a complete business plan - implementation - risk analysis.

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

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

Unit V Non - store retailing

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

Course Outcomes
- Students will be able to develop retail strategies considering the real - life retail environment.
- Students will be able to develop international retailing strategies.
- Students will be able to create retail and supply chain strategies.

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

MB826 CONSUMER BEHAVIOUR

Course Objectives
- To make the students to understand the factors influencing the consumer behaviour.
- To provide a basic understanding of the consumer decision making.
- To learn the Indian consumer insights to frame effective marketing strategies.
- To understand the various models of consumer decision making.

Course Content

Unit I Introduction

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

Unit II Internal Influences

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

Unit III External Influences

Culture and Consumer Behaviour - Role of Family -   References group: Role of Celebrities - Opinion leader – E word of mouth.

Unit IV Purchase Decision Process

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

Unit V Consumer Welfare
Value creation to consumer - Consumer satisfaction - Consumer protection act - Consumerism
- Diffusion of Innovation - Managing Dissonance - Emerging Issues - Relevant Case Studies
and application exercises.

Course Outcomes
- Students would be able to understand the concepts of consumer behaviour and its application in marketing management.
- Students would be able to assess the environmental and individual determinants of consumer behaviour.
- Students would be able to analyse the intricacies of consumer buying behaviour and strategies of consumer attitude formation and change.
- Students would be able to explain the concept of diffusion of innovation.
- Students would be able to appraise the various consumer decision making models.

Text and reference books
1. Kanuk L Schiffman L and Ramesh Kumar.S, Consumer Behaviuor, Prentice Hall New Delhi. Eleventh edition (2014).
2. Hawkins Del I. Roger J. Best and Kenneth A. Coney, Consumer Behaviour, Tata McGraw Hill, New Delhi (2005).
3. Kumar S. Ramesh. Consumer Behaviour: The Indian Context (Concepts and Cases), Pearson Education India, (2017).
4. Batra Satish K. and S. H. H. Kazmi. Consumer Behaviour, Excel Books India, 2nd edition, (2014).
5. Majumdar Ramanuj, Consumer behaviour: Insights from Indian market, PHI Learning Pvt. Ltd, (2010).
6. Loudon David L. and Albert J. Della Bitta. Consumer behaviour: Concepts and applications, McGraw Hill, Fourth edition, (2017).
7. Assael Henry, Consumer behavior and marketing action, Cengage learning, (2007).

MB827 SERVICES MARKETING

Course Objectives
- The course will teach students to understand the potential roles as executives of service producing organizations
- The course encourages students to adopt a constructive critical posture as customers of service organizations.

Course Content

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

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

Unit III Creating Value in Competitive Market
Positioning - Service Development and designing services - Service Blue Printing
Quality Function Deployment - adding value - Physical evidence and services cape.

Unit IV Delivering and Performing Service
Pricing strategies for services - creating and managing service delivery - Balancing demand
and capacity - waiting lines and reservation.

Unit V Managing Service Promises
Integrated services marketing communication - Services advertising strategies - integrated
model of services quality.

Course Outcomes
- Students will be able to understand the potential roles as executives of service producing
  organizations
- Students will be able to evaluate the service problems and provide prepare insights to
  solve the issues.

Text and reference books
1. Wilson A. Zeithaml V. A. Bitner M. J. and Gremler D. D. Services
   marketing: Integrating customer focus across the firm   McGraw Hill 7th edition (2018).
2. Lovelock Christopher and Jochen Wirtz. Services marketing: people technology
   strategy, Pearson Education 8th edition (2017).
3. Rust Roland T. Anthony J. Zahorik and Timothy L. Keiningham. Service marketing.
   Harper Collins, (1996).
4. Shanker Ravi. Services marketing The Indian perspectives Text and Readings Excel
   Books, New Delhi, 1st edition (2002).
5. Hoffman K. Douglas and John EG Bateson. Services marketing: concepts strategies
   and cases. Cengage learning, 5th edition (2017).

MB828 CUSTOMER RELATIONSHIP MANAGEMENT

Course Objectives
- To train the participants in the concepts of Customer relationship management
- To teach the strategies for implementing CRM practices in any organization.

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Course Content

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

Unit II Nature of Relationships
Significance of Customer Retention - Key Account Management - CRM and Knowledge
Management - Life time value of the customer - Customer loyalty and involvement.
Unit III CRM analytics
Data Mining and Data Warehousing - Real world applications.

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

Unit V Implications for organizations and the future
CRM implementation and effectiveness - Digital CRM - Management of Relationships.

Course Outcomes
• Students will be able develop Customer relationship management frameworks using the concepts learned in the course
• Students will be able develop strategies for implementing CRM practices in any organization.

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

MB829 MARKETING RESEARCH

Course Objectives
• The course aims to provide deeper insight into the plan and implementation of various research designs for collecting vital marketing information for marketing decisions.
• The course train students to systematically approach to the problems and arrive at solutions.

Course Content

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

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

Unit III Causal research - Measurement and Scaling

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

Unit IV Questionnaire Design and Sampling Design

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

Unit V Data analysis Application of Marketing Research and Report Writing

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

Course Outcomes

- Students should be able to develop a comprehensive marketing research plan.
- Students should be able to prepare marketing research blue print and research reports.

Text and reference books

1. Naresh K. Malhotra and Satyabhushan Dash, "Marketing Research An applied Orientation", Pearson, 6th Edition, (2012).
2. Carl Mcdaniel and Roger Gates, "Contemporary Marketing Research" South Western College Publishing, Singapore, 4th Edition.,(1999).
3. Tull, D.S. and Hawkins D.J., "Marketing Research Measurement and Method" Prentice Hall, New Delhi, 6th Edition, (2009).
4. Kinnear.T.C. and Taylor Jr "Marketing Research", Mcgraw Hill, New York, (1991).
5. Green and Tull "Marketing Research", Prentice Hall, New Delhi.
6. A.Parasuraman, "Marketing Research", Addison Wesley Publishing Company.
7. Seymour Sydman and Edward Blair, "Marketing Research A Problem Solving Approach", Mcgraw Hill International Editions, Singapore, (1998), 1st Edition.
8. Joseph F. Hair, Jr, Robert P.Bush, David J .Ortinau, "Marketing Research".

MB830 ADVERTISING MANAGEMENT

Course Objectives

- To provide an understanding of the basic principles of campaign planning and execution.
- To develop a managerial perspective and an informed decision marking ability to handle promotional situations.
- To design the creative advertising strategies for business situations.
- To learn and develop integrated marketing communications.

Course Content

Unit I Introduction

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

Unit II Campaign Planning

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

Unit III Media Planning

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

Unit IV Advertising Budget

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

Unit V Advertising Agency

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

Course Outcomes

- Students would be able to learn about the creative process of producing advertising messages, such as copywriting, art direction, and production.
- Students will be able to understand the process of Advertising Planning and Budgeting.
- Students would be able to recognize the importance of advertising in the marketing mix.
- Students would be able to analyze the characteristics of Advertisements and Advertising Agency operations.
- Students would be able to develop skills in media planning, budgeting, and measurement to evaluate advertising effectiveness.

Text Books and Reference books

1. S.A.Chunawalla and K.C.Sethia, Foundations of Advertising Theory and Practice, Himalaya Publishing, New Delhi, (2004).
2. Jaishri Jethwaney and Shruti Jain, Advertising Management, Oxford University Press New Delhi (2006).
3. Belch E. George and Belch A. Michael, Advertising and Promotion, Tata Mc Graw Hill, New Delhi (2003).
4. S.H.H.Kazmi Satish K Batra, Advertising and Sales Promotion, Excel Books, New Delhi (2001).
5. Rajeev Batra . John G. Myers and David A Aaker, Advertising Management, Prentice Hall , New Delhi, (1995).
6. Parameswaran, Brand building advertising: concepts and cases , Tata Mcgraw Hill, New Delhi.
7. Kennith Clow and DonaldBaack, Integrated Advertising Promotion and Marketing Communications, Pearson, New Delhi.

MB831 SALES MANAGEMENT

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

Course Content

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

Unit II Formulation of Sales Program
Forecasting Sales and Developing Sales Budgets - Designing and organizing Sales Territories.

Unit III Implementation of the Sales Program
Sales organisations - Relations with other departments -Profiling and recruiting sales people - Selecting and hiring applicants.

Unit IV: Sales force Recruitment and Selection
Planning - executing and evaluation of sales training programs - Motivating a sales force and Sales force compensation - Sales force expenses and transportation - Sales meeting and Sales contest.

Unit V: Evaluation and Control of the Sales Program
Analysis of Sales Volume - Marketing Cost and Profitability Analysis - Evaluating Sales persons performance.

Course Outcomes
- Students will be able to understand the field sales environment.
- Students will be able to create sales tactics by using real time applications.

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

MB832 STRATEGIC MARKETING

Course Objectives

- The course teaches two important strategic decisions in marketing "What market" and "What product".
- This course focuses on the tools and techniques used for taking these two important decisions.

Course Content

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

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

Unit III Portfolio analysis
Strategic Windows - Portfolio Analysis - Definition of "Product" and "Market" - Growth Share Matrix - The Growth Gain Matrix - Strategic Intent - Strategic Fit and leverage.

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

Unit V Strategic Evaluation learning's
Market Share Analysis - The use of pooled business experience and comparison of formal methods like business Position analysis and PIMS.

Course Outcomes
- The students will be able to evaluate the important strategic from product and market context.
- Students will be able to understand the role of tools and techniques to prepare strategic decisions.

Text and reference books
1. Abel and Hammond Strategic market planning problems and analytical approaches Prentice Hall (1979).
2. Business Articles on various dimensions of strategy supplied to you during the course.
3. Orville C. Walker Jr Harper W. Boyd Jr and Jean Claude Larreche "Marketing Strategy Planning and Implementation" Tata Mcgraw Hill Publishing Company 3rd Edition. New Delhi (2001).

4. David A. Aaker "Strategic Market Management" John Wiley and Sons Inc 5th Edition, Singapore (2000).
5. David W. Cravens Strategic Marketing 6/e Irwin McGraw Hill 2000.
6. Jean Pierre Jeannet and H. David Hennessey, "Global Marketing Strategies" All India Publishers and Distributors Regd Chennai First Indian Edition. (2001).
7. Ian Chaston, "New Marketing Strategies Evolving Flexible Processes to Fit Market Circumstance" Response Books, Sage Publications, New Delhi (2000).

MB833 MARKETING METRICS

Course Objectives
- To learn the common definition of the metrics being used in marketing today.
- To learn the use of marketing metrics to help shape how much we should be spending and on which marketing activities.
- To learn to draw the link from marketing expenditures to the financial well being and to take an effective marketing decisions.

Course Content

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

Unit II: Margins and Profits and Customer Profitability
Selling Price - variable cost - average variable cost - market spending - Breakeven point and Target volume - customer recency retention - customer life time value prospect lifetime value - acquisition versus retention spending.

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

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

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

Course Outcomes
- Students will be able to identify common definition of the metrics being used in marketing today.

- Students will be able to identify metrics that should be used by marketers.
- Students will be able to describe the use marketing metrics.
- Students should be able to create the link from marketing expenditures to the financial well-being and to take an effective marketing decisions.

Text and reference books

1. Farris Paul et al. Key Marketing Metrics: The 50+ metrics every manager needs to know, Pearson UK (2017).
2. Davis John A. Measuring marketing: 110+ key metrics every marketer needs. John Wiley and Sons (2012).
3. Kumar V. Profitable customer engagement: Concept metrics and strategies, Sage Publications India (2013).
4. Other Reading materials of relevant articles from the international marketing journals.

MB834 ANALYTICS FOR STRATEGIC MARKET PLANNING

Course Objectives
- This course teaches students to build marketing response models for strategic marketing decisions.
- This course will teach students to sharpen their analytical skills by getting exposure to computer based marketing models and tools for decision making.

Course Content

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

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

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

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

Unit V Models for Strategic Decision Making
Market entry and exit decisions - PIMS: shared experience models - product portfolio models: BCG, GE etc. - Financial models - analytical hierarchy process.

Course Outcomes
- Students will be able to take data empowered strategic marketing decisions by using analytical techniques.
- Students will be able to sharpen their analytical skills by getting exposure to computer based marketing models and tools for decision making.

Text and reference books
1. Lilien Gary L. and Arvind Rangaswamy, Marketing Engineering: Computer Assisted Marketing Analysis and Planning. Revised Second Edition Trafford Publishing (2004).
2. Moorthy K. S. (1993) "Theoretical Models in Marketing" Journal of Marketing (2) 92 106.
3. Bass Frank (1993) "The Future of Research in Marketing: Marketing Science " Journal of Marketing Research.
4. Shugan S. (2003) "Defining Interesting Research Problems" Marketing Science 22 (1,) 1 15.
5. Montgomery David (2001) "Management Science in Marketing", Marketing Science, 20 (4), 337, 48.

MB835 ANALYTICS FOR STRATEGIC MARKET IMPLEMENTATION

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

Course Content

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

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

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

Unit IV Sales Promotion

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

Unit V Digital Marketing strategies

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

Course outcomes

- The students will be able to take data empowered decisions by using analytical techniques in the area of marketing strategies.
- This course focuses on product, integrated marketing communications, price and promotions, and sales force and channels strategies.
- The students will be able to improve skills in viewing marketing processes and relationships systematically and analytically.

Text and Reference Books

1. Lilien, Gary L. and Arvind Rangaswamy, Marketing Engineering: Computer   Assisted Marketing Analysis and Planning, Revised Second Edition, Trafford Publishing, (2004).
References
2. Moorthy, K. S. (1993), "Theoretical Models in Marketing", Journal of Marketing, (2), 92 106.
3. Bass, Frank (1993), "The Future of Research in Marketing: Marketing Science," Journal of Marketing Research, (1), 1,   6.
4. Shugan, S. (2003), "Defining Interesting Research Problems," Marketing Science, 22 (1).
5. Montgomery, David (2001), "Management Science in Marketing," Marketing Science, 20 (4), 337, 48.
6. Leeflang, P. S. H. and D. R. Wittink (2000), "Building Models for Marketing Decisions: Past, Present, Future," International Journal of Research in Marketing, 17 (2   3), 105   126.
7. Barwise, Patrick (1995), "Good Empirical Generalizations," Marketing Science, 14 (3).

MB836 BUSINESS MARKET MANAGEMENT

Course Objectives

- The course will teach the basic concept of business marketing with respect to customer value management with several application areas.
- The course will enable students to understand the business market needs and solve their problems accordingly.

Course Content

Unit 1 Business Market Environment

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

Unit 2 Appreciating Value

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

Unit 3: Creating Value
Managing Market offerings: Conventional and Flexible Market Offerings - Value Based Pricing - Market Offering Across Borders - New Offering Realizations: Realization Strategy - Process Model. Business Channel management: Designing Value Added Market Channel - Direct Channel - Enhancing Resellers Performance.

Unit 4 Delivering Value
Gaining Customers: Prospecting new business relationship - Sustain resellers partnership - sustaining customer relationship.

Unit 5 Application Area
Marketing Business related to Standard Industrial Products and Services - Fabricated Industrial Products - Capital Equipments and Services.

Course Outcomes
• Students will be able to prepare business marketing strategy to create customer value across several application areas.
• Students will understand the business market needs and solve their problems accordingly

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

MB837 INTERNATIONAL MARKETING

Course Objectives
• The course will enable understanding of the international marketing scenario.
• The course will contrast the marketing strategies associated with different world regions.

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

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

Unit III Opportunities in International markets
Approaching opportunities and risks in international market - foreign market channels export potential of various regions like America Europe Africa etc. Marketing Research in International Markets.

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

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

Course Outcomes
- Students will be able to understand the international marketing scenario.
- Students will be able to create international marketing strategies for different goods and services.

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

MB838 DIGITAL MARKETING

Course Objectives
- The course is to help students to understand and evaluate digital marketing methods adweb analytics tools
- The course will provide a holistic understanding about the digital business model
- The course will teach the students about digital campaign management.

Course Content

Unit 1: Introduction to Digital Marketing
Introduction to digital marketing - Digital Tools - Organic vs Paid way of Marketing Search Engine Marketing - Online Advertising - Email Marketing - Blog Marketing Social Media Marketing - Multimedia Marketing - Mobile Marketing - Affiliate Marketing and Video Marketing.

Unit 2: Search engine marketing   online advertising and email marketing
Search Engine Marketing - Understanding Search Engine Marketing - Essential Search Engine Optimization - Advanced SEO Techniques and Tracking Search Performance. Online advertising - Understanding Online Advertising - Pay   per   Click Advertising Display Advertising and Tracking Ad Performance. Email marketing - Understanding Email Marketing

Unit 3: Social Media Marketing Blog Marketing and Multimedia Marketing

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

Unit 4: Mobile Marketing Affiliate Marketing and Video Marketing

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

Unit 5 Web Analytics

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

Course Outcomes
- Students will be able to create digital marketing campaigns.
- Students will be able to analyse the competitor mixes and provide strategic solutions to digital marketing mixes.

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

MB839 NEURO MARKETING

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

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

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

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

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

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

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

MB840 BUSINESS ANALYSIS AND ITC IN MARKETING AND RETAIL

Course Objectives
- The course provides the knowledge and necessary skills for carrying out business analysis in Marketing and Retailing.
- The course provides knowledge to carry out IT integration projects in Marketing and Retail domains.

Course Content

Unit I Trends in Retailing

Types of Retailers - Multichannel retailing - Customer buying behavior - Role of emerging IT - Overview of Retail Technology   - CRM   - Loyalty management - major IT products and service providers in Marketing and retail - case studies.

Unit II IT in Store operations

Store Operations concepts and practices and IT - Managing the store   - In   store operations and management Store layouts - Design and Visual merchandising - Customer service   - choosing technology   - Planogram (POG) - Tills: Cash counter - point of sale - work force management.

Unit III IT in Merchandizing

IT applications in Merchandising - managing the merchandise assortment - merchandise planning system - buying merchandise - order placing - ranging -   retail pricing - retail communication mix - invoice planning.

Unit IV IT in downstream supply chain

Supply chain management and IT   planning supply chain   information systems - In bound and out bound logistics   - Transportation - Distribution systems - Logistics   - warehousing reverse logistics.

Unit V IT in E - retail

Scale economics - Network effect of Internet - Defining value in Internet   - operations strategy for e-tailing - SCM in e-tailing - Drivers of cost - managing product returns - advantages of Social media - Internal laws in payments and taxes - case studies.

Course Outcomes
- Students will be able to analyse the business analysis problem scenario in in Marketing and Retailing.
- Students will have the knowledge to carry out IT integration projects in Marketing and Retail domains.

Text and reference books
1. G. Joshi, Information Technology for Retailing, Oxford University Press, (2009).
2. Khurana, Information Technology for Retailing, McGraw Hill Publishing, (2010).
3. Levy, B. A. Weitz and A. Pandit, Retailing management, McGraw Hill publication, Sixth edition, (2008).
4. Business Analysis Body of Knowledge, Ver. 2.0, International Institute of Business Analysis, (2012).

MB841 FINANCIAL INSTITUTIONS AND SERVICES

Course Objectives

- Provide in   depth understanding of the financial system, its structure, and its role in the economy.
- Equip students with the knowledge of various financial products and services provided by different financial institutions.
- Understand the regulatory and non-regulatory institutions and their roles in the financial system.

<div align="center">**Course Content**</div>

Unit I Structure of Financial System
Overview of Indian financial system -   The nature of financial system - Role of financial system in the economy - Structure of Financial system - Reforms in Indian financial system Recent developments.

Unit II Financial institution and Regulatory framework
Banking and nonbanking institutions - Reserve Bank of India (RBI) and its functions Securities and Exchange Board of India (SEBI) and its functions - Other regulatory bodies of financial institutions.

Unit III Financial Markets and Financial Instruments
Money market - Capital markets - Debt Market - Derivatives market - Primary and secondary markets - Financial instruments in the respective markets - Depositories and custodians Mutual funds.

Unit IV Financial Services
Merchant banking services - Bill discounting - Factoring - Venture capital - Leasing Hire Purchase.

Unit V Digital Financial Services
Non- fund based financial services,   Credit cards - Introduction to Fintech - Mobile banking - Payments bank - UPI payment system - Micro Finance   - Credit rating - Rating agencies in India and abroad.

Course Outcomes
Upon completion of this course, students will be able to:
- Understand the structure of the financial system and its role in the economy.
- Identify different financial institutions and their functions, both regulatory and non – regulatory.
- Evaluate the different financial markets and instruments available.
- Analyse the different financial services offered by institutions and their applicability in various business scenarios.

Text and reference books
1. Pathak Bharathi V, The Indian Financial System, 5th edition, Pearson Education, Chennai (2018).
2. Financial Institutions and Services by L. M. Bhole and Jitendra Mahakud, 7th edition, Tata McGraw Hill Education, New Delhi (2022).
3. Indian Financial System: Theory and Practice by M.Y. Khan and P.K. Jain, 3rd edition, Tata McGraw Hill Education, New Delhi (2019).
4. Financial Markets and Institutions in India by T. Ravi Kumar and N. Vijayalakshmi, Oxford University Press, New Delhi (2018).
5. Financial Services by Gurusamy, 5th edition, Tata McGraw Hill Education, New Delhi (2021).

MB842 INVESTMENT SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

Course Objectives

- To develop a comprehensive understanding of investment securities and financial markets
- To learn fundamental investment theories and apply them to portfolio management
- To develop skills to analyze securities and make investment decisions
- To understand the principles of risk management and diversification
- To learn about different types of investment products and their role in portfolio construction
- To develop skills to construct and manage investment portfolios.

Course Content

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

Unit II Security analysis   (Nonfinancial)
Internal value and market value of various securities - Internal value and market value of firm Economic analysis -   Industry analysis.

Unit III Security analysis (Financial)
Company analysis - Financial Statement analysis - projecting earnings under stable as well as dynamic conditions - risk and return factors.

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

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

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

- Understand the mechanics of securities markets, types of securities, and sources of investment information.
- Analyse and evaluate the internal and market value of various securities, including firm and economic analysis.
- Conduct financial statement analysis and project earnings under stable and dynamic conditions, while considering risk and return factors.
- Apply portfolio theory, selection, and diversification techniques to build an efficient portfolio and assess portfolio performance.

- Apply various portfolio management techniques such as portfolio Objectives, sizing, selection, readjustment, and timing of disinvestments.

Text and references books
1. Donald Fischer, Ronald Jordan and Ashwini Pradhan, Security Analysis and Portfolio Management", 7th edition, Pearson Education, New Delhi, (2018)
2. Bhalla V K, Investment management   Security analysis and portfolio management, 19th edition, S. Chand and Company Pvt Ltd, New Delhi, (2013).
3. Kannadasn.M.,Fixed Income Securities: Valuation and Risk Management, Cengage, (2022).
4. Chandra Prasanna, Investment Analysis and Portfolio Management, 5th edition, Tata McGraw Hill, New Delhi, (2017).

MB843 FINANCIAL DERIVATIVES

Course Objectives
- To provide students with a deep understanding of financial derivatives instruments and markets.
- To equip students with the necessary analytical skills to evaluate and manage financial derivative instruments in real   world scenarios.
- To help students understand the risks associated with derivative instruments and how to manage those risks.

Course Content

Unit I Introduction to Derivatives
Introduction to Financial Derivatives - Types of Derivatives - Forwards, Futures, Swaps, Options - Application of derivatives in Risk Management - Hedging and Speculation.

Unit II Forwards and Futures
Forwards and Futures market - Mechanics of futures markets - Different categories of Forwards and Futures - Hedging strategies - Valuation - Determination of forward and futures prices - Risk management using futures - Futures trading in exchanges.

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

Unit IV Options
Types of options and their characteristics - Specification of stock options - Application of options - Valuation of options - Properties of stock options - Merton model and binomial trees - The Black Scholes model - Options Trading on Exchanges.

Unit V Other Derivatives
Introduction to Interest rate derivatives - Weather derivatives - Exotic options - Derivatives current trends in India - Regulation and Governance of Derivatives Market.

Course Outcomes
- Students should be able to understand the types of financial derivatives and their characteristics.
- Students should be able to analyze and apply various derivatives instruments in risk management.
- Students should be able to evaluate the different methods of valuation of derivatives instruments.
- Students should be able to understand the potential benefits and pitfalls of using financial derivatives.

Text and reference books
1. Hull, C. John, and Sankarshan Basu. Options, Futures and Other Derivatives, 10th edition, Pearson Education, Chennai (2018).
2. Gupta, S. L. Financial Derivatives: Theory, Concepts and Problems, 2nd edition, PHI Learning, New Delhi, (2017).
3. Kannadasn.M, Fixed Income Securities:Valuation and Risk Management, Cengage, (2022).
4. Financial Derivatives and Risk Management by Satyajit Das (PHI Learning) 1st Edition, (2012).
5. Durbin, Michael. All About Derivatives. 2nd edition, Tata McGraw Hill publications, New Delhi (2010).
6. D. M. Chance and R. Brooks, An Introduction to Derivatives and Risk Management, 9th edition, Southwestern Cengage Learning, (2013).
7. J. C. Hull, Option Futures and Other Derivatives, 9th edition Pearson, 2015.
8. S. S. S. Kumar, Financial Derivatives, Pearson, New Delhi.

MB844 INVESTMENT BANKING

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

Course Content

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

Unit II Issue Management
Guidelines for Issues Management - IPO - Offer documents - Management of capital issues - Pre issue activities - Post issue activities - Underwriting and Brokerage - Registrar and Share transfer Agents - Pricing and Marketing of public issues - Listing Guidelines.

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

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

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

Course Outcomes
- Understand the role of investment bankers and the services they offer.
- Gain knowledge about the prevailing legal and industry frameworks of investment banking.
- Develop a conceptual understanding of the global and Indian investment banking process.
- Understand the guidelines for issue management and the process of IPO, management of capital issues, underwriting and brokerage, and marketing of public issues.
- Learn about disinvestment mechanisms such as buybacks, mergers, acquisitions, and delisting and understand the regulatory framework of investment banking, stock exchanges, and share brokers.

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

MB845 ASSET BASED FINANCING

Course Objectives
- To provide students with a comprehensive understanding of the concept of asset-based financing and its role in corporate finance.
- To familiarize students with various types of assets that can be used as collateral in asset-based financing.
- To introduce students to the legal and regulatory frameworks governing asset-based financing in India.

- To equip students with the skills and knowledge required to evaluate the creditworthiness of borrowers and manage the risks associated with asset-based financing.

Course Content

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

Unit II Fund Based Services
Bills discounting - Factoring - Forfaiting - Types - Advantages - Inter Corporate Lending - Money Market systems - Debt instruments.

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

Unit IV Refinancing
Refinancing by finance company schemes - Procedures - Utility.

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

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

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

MB846 BEHAVIOURAL FINANCE

Course Objectives
- The course is focused on behavioural factors influencing financial markets and the corporate world.
- The course targets the link between the peculiarities of human behaviour and aspects of financial and investment management, as well as corporate and risk management.
- The course puts various "behavioural mechanisms" into a more basic psychological framework spanning the mechanisms of information perception, emotions, memory, and attention.

Course Content

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

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

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

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

Unit V Emotions and decision making the science of neuroeconomics
Experimental measurement of risk related preferences: measuring risk through probabilistic set of gambles through questionnaire - Emotional mechanisms in modulating risk taking attitude - Neurophysiology of risk taking - Personality traits and risk attitudes in different domain - Neurophysiology of decision making the role of hormones and neurotransmitters - Effect of

tools from cognitive neuroscience to aid in understanding the basics of economic behaviour - Introduction to the science of neuroeconomics and Neuro marketing.

Course Outcomes
- Students will be able to illustrate the difference between expectations of efficient, rational investor behavior and actual behavior.
- Students will be able to explain the foundations of behavioural finance.
- Students will be able to evaluate behavioural aspects of investing.
- Students will be able to examine the various aspects of emotions and decision making of behavioural science.

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

MB847 PERSONAL FINANCE

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

Course Content

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

Unit II Managing Your Personal Finances
Financial Services - Savings Plans and Payment Accounts - Introduction to Consumer Credit - Choosing a Source of Credit - The Costs of Credit Alternatives.

Unit III Making Your Purchasing Decisions
Consumer Purchasing Strategies and Legal Protection - The Housing Decision - Factors and Finances.

Unit IV Insuring Your Resources
Property and Motor Vehicle Insurance - Health - Disability - Long-Term Care Insurance - Life Insurance.

Unit V Investing Your Financial Resources
Investing Fundamentals - Investing in Stocks - Investing in Bonds - Investing in Mutual Funds Investing in Real Estate and Other Investment Alternatives - Starting Early Retirement Planning.

Course Outcomes
- Students will be able to understand the importance of personal finance and its role in achieving financial goals.
- Students will be able to develop effective money management strategies through budgeting and financial planning.
- Students will be able to analyse and compare different financial services and credit options to make informed decisions.
- Students will be able to understand different types of insurance and how to choose appropriate coverage.
- Students will be able to develop an understanding of investment fundamentals and the importance of starting early with retirement planning.

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

MB848 ADVANCED CORPORATE FINANCE

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

<div align="center">Course Content</div>

Unit I Stochastic Models
Stochastic Models for risk and uncertainties in Capital budgeting.

Unit II Corporate Structure
Capital Structure determination - Equity and Debt forms - EM Hypothesis.

Unit III Corporate Financing
Corporate financing and market efficiency.

Unit IV Leasing
Concepts - Types - Lease Evaluation and Accounting - Lease rentals - Legal Aspects.

Unit V: Mergers and Amalgamation
Merger as a Strategy - SEBI Guidelines - Corporate Tax Planning - Amalgamation - Sickness - Revival - BIFR Provisions.

Course Outcomes
- Students will be able to understand the application of stochastic models in risk and uncertainty analysis in capital budgeting.
- Students will be able to evaluate the different types of capital structure and the role of equity and debt in it.
- Students will be able to analyse the efficiency of corporate financing in the market.
- Students will be able to demonstrate knowledge of leasing concepts, evaluation, accounting, and legal aspects.
- Students will be able to develop strategies for mergers and amalgamation in compliance with SEBI guidelines and corporate tax planning and understand the provisions for sickness and revival under BIFR.

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

MB849 INSURANCE AND PENSION SCHEMES

Course Objectives
- To provide students with a comprehensive understanding of insurance and pension schemes in India.
- To introduce students to the various types of insurance and pension products available in the market.
- To familiarize students with the regulatory framework governing insurance and pension schemes in India.

- To develop analytical skills of students in assessing the suitability of insurance and pension products for individual and organizational needs.

Course Content

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

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

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

Unit IV Rural/Social Insurance
Obligations of insurers to rural and social sectors - Claims - Agency commission structure personal development - Behavioural aspects.

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

Course Outcomes
- Students can analyze and compare different types of insurance and pension products available in the market.
- Students will be able to evaluate the benefits and drawbacks of different insurance and pension schemes.
- Students can understand the regulatory framework governing insurance and pension schemes in India.
- Students will be able to develop skills in assessing individual and organizational needs for insurance and pension products.
- Students will be able to develop skills in creating a suitable insurance and pension portfolio for individuals and organizations.

Text and references books
1 Insurance: Principles and Practices, M.N. Mishra, S. Chand and Co., 2021.
2 Pension Schemes and Insurance, Ramesh Bhat, Himalaya Publishing House, 2020.
3 Handbook on Insurance by Insurance Regulatory and Development Authority of India (IRDAI, latest edition).
4 Holyoake Julia. and Bill Weipers, Insurance, 4th Rev. edition, Financial World Publishing, (2004).
5 Pension Fund Regulation and Risk Management: A Handbook for Pension Fund Trustees, Bharat B. Shetty.
6 Insurance and Risk Management, C.R. Kothari and P.K. Mishra.

MB850 STRATEGIC COST ACCOUNTING AND MANAGEMENT CONTROL

Course Objectives
- To develop an understanding of the strategic role of cost accounting and management control in organizations.
- To introduce the students to different costing techniques and their applications in decision making.
- To provide an understanding of performance measurement systems and their role in control and motivation.
- To equip the students with the knowledge of using management accounting tools for strategic planning and control.

Course Content

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

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

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

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

Unit V Cost Analysis
Capital budgeting and cost analysis - management control and transfer pricing - performance measurement.

Course Outcomes
- Students will be able to develop an understanding of cost accounting principles and their application in different contexts.
- Students will be able to analyze and interpret cost data to make informed decisions.
- Students can understand the importance of performance measurement and management control systems in achieving organizational Objectives.
- Students will be able to evaluate and apply different management accounting tools and techniques for strategic planning and control.
- Students will be able to develop the ability to communicate and present management accounting information effectively.

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

MB851 TAX LAWS AND TAX PLANNING

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

Course Content

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

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

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

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

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

Course Outcomes

- Students will be able to apply tax planning techniques in real   world scenarios.
- Students will gain a comprehensive understanding of the Indian taxation system and its impact on businesses.
- Students will be able to analyze and interpret the tax laws and regulations in India.
- Students will be able to identify and evaluate the tax implications of various business decisions.
- Students will be able to develop tax   efficient strategies for businesses.

Text and references books

1. Girish Ahuja and Ravi Gupta, Income Tax Law and Practice (Latest Edition).
2. Madhukar N Hiregange and G. Padmanabhan, GST Law and Practice (Latest Edition).
3. Taxmann's Direct Taxes Manual (Latest Edition).

MB852 TREASURY MANAGEMENT

Course Objectives

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

Course Content

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

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

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

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

Unit V Treasury operation (Forex)
Forex Markets an Overview - Exchange Rates - Forex Risks - Forex derivatives like Forward, future, Swaps, Options - Futures Exposure Management - Overseas Borrowing.

Course Outcomes
- Demonstrate an understanding of the role and function of treasury management in corporate finance.
- Identify and evaluate different financial instruments and techniques used in treasury management.
- Develop skills in cash management, foreign exchange management, and risk management.
- Analyse and interpret financial data to make informed decisions in treasury management.
- Apply treasury management concepts and techniques to real   world financial scenarios.

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

MB853 INTERNATIONAL FINANCE

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

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Course Content

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

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

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

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

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

Course Outcomes
- Develop an understanding of international financial markets and its instruments.
- Understand exchange rate mechanisms, currency risks, and their management.
- Acquire knowledge of international financial institutions and their roles.
- Develop skills to analyse and evaluate global investment opportunities.
- Develop an understanding of the regulatory framework of global financial markets.

Text and references books
1. Eiteman David, Stonehill Arthur and Moffett Michael, Multinational Business Finance, 15th edition, Pearson education, Chennai, (2021).
2. Levi, Maurice D. International Finance. 6th edition, Routledge, 2018.
3. Buckley, Adrian, and Mark Casson. The Future of Finance: The LSE Report. 1st edition, Routledge, 2021.
4. Madura, Jeff. International Financial Management. 13th edition, Cengage Learning, 2018.
5. Shapiro Alan, Moles Peter and Kumar Jayanta Seal, International Financial Management, Wiley India, (2016).

MB854 CORPORATE VALUATION

Course Objectives
- To provide students with an understanding of corporate valuation techniques and their applications
- To teach students the various methods of valuing a company and their suitability for different types of businesses
- To familiarize students with financial statement analysis and the role it plays in corporate valuation

- To enable students to critically evaluate the strengths and weaknesses of different valuation techniques and apply them to real world scenarios.

Course Content

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

Unit II Valuation Analysis
Economy and industry research - Historical analysis - Accounting analysis - Income and expenses analysis - Ratio analysis - Cash flow analysis - Strategy analysis - Michael Porter's Five Forces - Company risk analysis - PEST - BCG matrix - GE/McKinsey matrix - ADL matrix - Sensitivity analysis - Scenario analysis - Simulation - Others.

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

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

UNIT V Valuation from MandA perspective and Value enhancement
Background - Classification of mergers and acquisitions - Processes and steps in MandA Activities - Motives - Synergy effects - Theory and empirical evidence - Value based management - Valuation from the view of a manager.

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

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

MB855 FINANCIAL RISK ANALYTICS

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

Course Content

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

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

Unit III Risk Management
Managing Credit Risk - Operational Risk - Market Risk and Insurance.

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

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

Course Outcomes
- Students will be able to understand the different types of risks involved in the finance industry and their sources.
- Students will be able to analyze and manage credit, market, and operational risks using various tools and techniques.
- Students will be able to evaluate and measure risks in financial instruments such as derivatives, swaps, and credit ratings.
- Students can explain the regulatory framework and legal issues involved in risk management.
- Students will be able to implement integrated risk management strategies for businesses.

Text and references books
1. Vipul Prakashan, Rekha Shinde, and Sandhya Kulkarni, Vipul Prakashan, Financial Risk Management, (2022).
2. John C. Hull and Sankarshan Basu, Risk Management and Financial Institutions, Wiley India Pvt. Ltd. (2021).
3. Aswath Damodaran, Strategic Risk Taking: A Framework for Risk Management, Pearson Education India (2017).
4. Dun and Bradstreet, Financial Risk Management, TMH, (2006).
5. John C Hull , Risk management and Financial Institutions, Wiley, (2015).

6. Financial Risk Manager Handbook by Philippe Jorion and GARP (Global Association of Risk Professionals), Wiley India Pvt. Ltd, (2019).
7. Kannadasn. M, Fixed Income Securities: Valuation and Risk Management, Cengage, (2022).
8. Fabrice Douglas Rouah and Gregory Vainberg, Financial Risk Analytics: A Term Structure Model Approach for Banking, Insurance, and Investment Management, Wiley India Pvt. Ltd, (2019).
9. Joël Bessis, Risk Management in Banking, Wiley India Pvt. Ltd, (2015).

MB856 BUSINESS ANALYSIS AND IT CONSULTING IN BANKING AND FINANCIAL SERVICES

Course Objectives
- The course provides the knowledge and necessary skills for carrying out business analysis in BFS domain.
- The course discusses the growing trends and IT developments in the Banking and Financial services domain.

Course Content

Unit I Banking Concepts and IT
Overview of financial instruments - Financial market - Financial statements - Introduction to banking - Retail banking - Deposit products - Retail channels - Instruments - Retail payments - E banking - evolution and growth - Sales and marketing - A schematic of a retail Bank.

Unit II IT in Mortgages, Consumer Lending and Wholesale Banking
Mortgages, other loans - Community Banks - Credit Unions and Building Societies- Farm Credit - Retail Lending Cycle - Introduction to Cards and payments - Overview of Credit card market - Major players - Recent developments - Introduction to Wholesale banking and Commercial Lending - Corporate lending process - Credit derivatives - Treasury services - Cash management - Trade finance - Payment network.

Unit III IT in Investment Management and Banking
Introduction to Investment management - Investment management process - Different classes of Investment management firms - Introduction to Investment banks - Functions - Major investment banks - Divisions - Investment banking post economic crisis - Brokerage Underwriting - Floor of Exchange - Order types - Over the counter market - brokerage firm - Market indices.

Unit IV IT in Clearing and Settlement
Custody - Securities market place - Trading and Settlement - Asset Servicing - Trading - Clearing - Settlement.

Unit V IT in Risk Management and Corporate Services
Concept of risk - Types of risk - Risk Management - Benefits of Corporate Administration.

Course Outcomes
- Students will be able to apply their skills for carrying out business analysis in BFS domain
- Students will evaluate growing trends and IT developments in the Banking and Financial services domain and frame appropriate strategies for given problem.

Text and reference books
1. L. Harris, Trading and Exchanges: Market Microstructure for Practitioners, Oxford University Press, (2012).
2. M. Hara, Market microstructure Theory, John Wiley, (2008).
3. J. Keyes, Handbook of Technology in Financial Services, CRC Press, (1999).
4. J. Keyes, Financial Services Information systems, Taylor and Francis, (2005).
5. Business Analysis Body of Knowledge, Ver. 2.0, International Institute of Business Analysis, (2012).

MB857 PRODUCTION PLANNING AND CONTROL

Course Objectives
- To extend the knowledge gained in POM Course
- To formulate the business operations problem
- To understand production facility design

Course Content

Unit I Capacity Planning
Introduction to Capacity Planning - Long range capacity planning process - Measuring Capacities - Economics and Diseconomies of scale.

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

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

Unit IV Resource Planning
Master Production Schedule - Materials Requirement Planning - Solving the MRP problem   - Overview of JIT - MRP II.

Unit V Product Development
Introduction to Product and Service Design - Factors affecting product design - Phases in product design - Importance for product design/ redesign - Difference between product design and service design.

Course Outcomes
- Students understand the sequential planning process in operations decision making
- Students will be able to address the problems of locating designing planning and production of production facilities.

Text and reference books
1. G. Srinivasan. "Quantitative Models in Operations and Supply Chain Management" PHP Learning Pvt. Ltd.
2. B. Mahadevan Operations Management: Theory and Practice, Pearson Third Edition.
3. William J Stevenson, Operations Management, McGraw Hill Education, New Delhi.

MB858 LOGISTICS MANAGEMENT

Course Objectives
- To gain an understanding of the history of logistics and its evolution over time including the latest trends and technologies.
- To create an understanding about the concepts of logistics and distribution management and their applications in the real situation.
- To develop the ability to apply logistics concepts and principles to practical situations and solve problems related to logistics and supply chain management.

Course Content

Unit I Logistics Management
Definition of logistics and the concepts of logistics - Logistics Activities - Functions of the logistics system – transportation – warehousing - order processing - information handling and procurement - Third party - and fourth party logistics.

Unit II Inventory Management in Logistics
Inventory management in logistics system - inventory decisions using Newsvendor Problem Supply chain Coordination and related concepts.

Unit III Distribution Management
Outbound logistics - Facility location - Classical location problems- Strategic planning models for location analysis - location models - multi Objectives analysis of location models - An Overview of Traditional Vehicle Routing Problems - Integrated Models of Location And Routing - Role of transportation in a supply chain - direct shipment warehousing - cross docking - push vs. pull systems - transportation decisions (mode selection fleet size) - market channel structure.

Unit IV Importance of Logistics
Logistics Customer Service - Modelling logistics systems - Simulation of logistic systems cost effective distribution strategies - Value of information in logistics - E logistics risk pooling effect - International and global issues in logistics - Integrated functional activities in logistics - Role of government in international logistics and Principal characteristics of logistics in various countries and regions.

Unit V Logistics in different industries
Airline Schedule Planning - Railway Networks - Postal services - the maritime industries
health care industry and other service industries.

Course Outcomes
- Students will able to learn about the basic logistics activities and concepts such as transportation warehousing and distribution and how these activities contribute to the overall supply chain strategy.
- Students will able to apply logistics concepts and principles to practical situations and solve problems related to logistics and supply chain management.
- Students should be able to apply these skills and knowledge to optimize logistics activities and create value for the organization contributing to its success.

Text and reference books
1. Chandra P. and Jain N. (2007). The logistics sector in India: Overview and challenges, India: Indian Institute of Management, Ahmedabad.
2. David Bloomberg Stephen Lemay and Joe Hanna: 'Logistics' Prentice Hall (2001).
3. Thomas Teufel Jurgen Rohricht and Peter Willems: 'SAP Processes: Logistics' Addison Wesley, (2002).
4. Lambert D. Stock J. R. and Ellram L. M. (1998). Fundamentals of logistics management, McGraw Hill.
5. Harrison A. Skipworth H. van Hoek R. I. and Aitken J. (2019), Logistics management and strategy, Pearson UK.

MB859 SUPPLY CHAIN MANAGEMENT

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

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Course Content

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

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

Unit III Planning demand and supply in a supply chain

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

Unit IV Designing and planning transportation networks

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

Unit V Revenue Management

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

Course Outcomes
- Students will be able to understand the business operations.
- Students will be able identify and solve problems relating to supply chain Management.
- Students will be able to solve industry problems.

Text and reference books
Sunil Chopra and Peter Meindel, Supply Chain Management: Strategy, Planning, and Operation, Prentice Hall of India, 2002.

MB860 SERVICE OPERATIONS MANAGEMENT

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

Course Content

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

Unit II Service Characteristics and Strategies

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

Unit III Gamification of Services

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

Unit IV Service Quality

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

Unit V Measuring performance in services

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

Course Outcomes
- Students will be able to apply the key principles tools and techniques of service operations management to design   plan and manage efficient and effective service delivery processes.
- Students will be able to analyze service operations identify opportunities for improvement and develop appropriate strategies to enhance service quality   customer satisfaction and profitability.
- Students will also be able to evaluate different service delivery channels manage service capacity and demand and apply relevant performance metrics to monitor and control service operations.

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

MB861 ADVANCED MATERIALS MANAGEMENT

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

Course Content

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

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

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

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

Unit V
Policies - Standards and practices - Procedures.

Course Outcomes
- Students will develop analytical skills to critically analyze and evaluate complex materials management scenarios, identify problems, and apply advanced tools and techniques to solve them.
- Students will gain an in   depth understanding of advanced concepts, theories, and
- principles related to materials management.

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

MB862 ADVANCED OPERATIONS RESEARCH

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

Course Content

Unit I Advanced Linear Programming Applications
Make or Buy decision models - Inventory Management models - Financial Planning models - Marketing Research models - Work force assignment models.

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

Unit III Variants of Linear Programming Models
Introduction to Data Envelopment Analysis - Efficiency Frontier - Constant returns to scale and Variable returns to scale - Goal programming.

Unit IV Non-Linear Programming
Introduction to Nonlinear program - constrained and unconstrained non-linear models- Lagrange multiplier - Khun tucker conditions.

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

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

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

MB863 TECHNOLOGY FORECASTING

Course Objectives

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

Course Content

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

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

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

Unit IV Forecast Impact on Decision Making
Forecast Impact on Decision Making -   Forecasting uses through cases.

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

Course Outcomes
- This course teaches students about technology forecasting and its impact on decision making.
- Students will learn various quantitative and qualitative forecasting methods   and develop skills in assessing and managing technological change.
- By the end of the course   students will be able to make informed decisions based on technology forecasting and its impact on their organizations.
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Text and reference books
1. Alan L. Porter   A. Thomas Roper   Thomas Wimason   Jery Banks and Fredrick A. Rossini 'Forecasting and Management of Technology' 2nd Edition,   John Wiley.
2. Firat   A. K.   Woon   W. L.   and Madnick   S. (2008),. Technological forecasting A review. Composite Information Systems Laboratory (CISL)   Massachusetts Institute of Technology   1   19.
3. Coates   V.   Farooque   M.   Klavans   R.   Lapid   K.   Linstone   H. A.   Pistorius   C.   and Porter   A. L. (2001). On the future of technological forecasting, Technological forecasting and social change.

MB864 MANUFACTURING STRATEGY

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

Course Content

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

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

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

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

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

Course Outcomes
- Students will able to understand the concept and the importance of manufacturing strategy for industrial enterprise competitiveness.
- Students will able to identify formulation and implement strategies for manufacturing and therefore enterprise competitiveness
- students will able to evaluate and identify the strengths weaknesses opportunities and threats (SWOT analysis) of the manufacturing sector

Text and reference books
1. Narayanan V. K. "Managing Technology and Innovation for Competitive Advantage" Pearson Education Inc.
2. Korgaonkar M. G. "Just In Time Manufacturing" MacMillan Publishers India Ltd.
3. Sahay B. S. Saxena K. B. C. Ashish Kumar "World Class Manufacturing" MacMillan Publishers.
4. Hill and Terry, 'Manufacturing Strategy', 3rd. Edition, Richard D. Irwin Inc.

MB865 SUPPLY CHAIN ANALYTICS

Course Objectives
- To expose students to the tools and techniques in analytics.
- To enable students to apply analytics to solve business problems.
- To enable analytical thinking in students.
- To ensure hands on implementation of analytics models.

Course Content

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

Unit II Optimization for Resource Allocation
Linear Programming (LP) formulation for resource allocation problems - Data Envelopment Analysis - Conjoint Analysis - Case study solution in Python for a resource allocation problem.

Unit III Dynamic Inventory Modelling
Introduction to Dynamic Programming - Sequential Decision Making - Markov Models Solving the Deterministic Dynamic Inventory Problem using Markov Models - Solving the Stochastic Dynamic Inventory Problem using Markov Models.

Unit IV Transportation Modelling
LP formulation of the Travelling Salesman Problem (TSP) -   LP formulation of the Vehicle Routing Problems (VRP) - Single Depot and Multi Depot - Heuristics for Chinese Postman Problem (CPP) - Python implementation of LP formulations of TSP and VRP.

Unit V Heuristic Models
Introduction to Heuristic Techniques - Genetic Algorithm - Simulated Annealing - Implementation of GA and SA for TSP and VRP in Python.

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

MB866 LEAN MANUFACTURING

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

Unit I Toyota Production System
TPS and Lean Foundation - History of Manufacturing - Introduction to The Toyota Way Lean Thinking.

Unit II Value Chain and Value stream mapping
Define Value - Value vs Waste - The 3 Ms - Identify Value Stream - Value Stream Mapping - Lean Diagnostic Tools.

UNIT III Lean Concepts I
Create Flow - Waste elimination - Single Piece Flow - SMED Enable Pull - Heijunka load leveling - JIT and Kanban.

Unit IV Lean Concepts II
Sustain Flow - Problem Solving - Problem solving journey - Jidoka and poka yoke - Sustain Flow - Equipment Reliability - Autonomous Maintenance - Planned Maintenance.

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

Course Outcomes
- Understanding the fundamental principles of Lean manufacturing and how they apply to various industries and processes.
- Learning how to use tools and techniques such as 5S, VSM, RCA, and Kaizen to identify and eliminate waste.
- Developing Skills in process improvement, waste reduction and continuous improvement.

Text and reference books
1. Womack J. P. and Jones D. T. (1997) "Lean thinking -banish waste and create wealth in your corporation" Journal of the Operational Research Society, 48(11), 1148.
2. Liker J. K. and Morgan J. M. (2006), "The Toyota way in services: the case of lean product development. Academy of management perspectives" 20(2) 5 20.
3. Rother M. and Shook J. (2003) "Learning to see: value stream mapping to add value and eliminate mud". Lean Enterprise Institute.
4. Masaaki Imai "Kaizen: The key to Japan's competitive success" McGraw Hill.
5. Ronald G. Askin and Jeffrey B. Goldberg, "Design and Analysis of Lean Production Systems", John Wiley and Sons, 2003.

MB867 INNOVATION AND RESEARCH AND DEVELOPMENT MANAGEMENT

Course Objectives
- To create an understanding about the creativity innovation and managing uncertainty in organisation.
- To learn to manage incremental breakthrough and discontinuous innovations.
- To understand the business context of innovation and performance measures for the innovation engine.
- To gain knowledge and skills in R and D management including planning organizing staffing scheduling controlling budgeting and performance evaluation.

Course Content

Unit I Creativity and Innovation
Innovation process - critical function in the Innovation Process - Evolving innovative culture - individual and group creativity - Teams for innovation.

Unit II Managing Uncertainty
Link between Innovation and uncertainty - Managing Incremental breakthrough and discontinuous innovations - managing streams of innovation across technology Cycles - developing leadership styles and capabilities for managing innovation streams.

Unit III Innovation Managing the Process
Business Context - Innovation Drives Growth - performance measures for the innovation Engine - Decision criteria - Innovation Engine - Element of the innovation system - Critical Success Factors - Single project and Portfolio Management issues - fostering an innovative environment.

Unit IV RD and Management
Product and Technology life cycle - planning organizing staffing scheduling controlling - budgeting of R and D - Performance evaluation of R and D.

Unit V HR Management in R and D
Issues related to Managing Technocrats and scientists - Group dynamics - Training Motivation - Communication - and MIS for R and D.

Course Outcomes
- Students will learn about creativity innovation and uncertainty management in organizations.
- Students will learn about the innovation process strategies for managing innovation and gain R and D management skills.
- Students will have developed leadership capabilities and critical thinking skills for managing innovation and uncertainty in an organization.

Text and reference books
1. Shiomo Maintal and D.V.R. Seshadri 2007, 'Innovation Management: Strategies Concepts and Tools for Growth and Profit' Sage Publications.
2. Gerard H. Gaynor 'Handbook of Technology Management' McGraw Hill (1996).
3. Miller W. L. and Morris L. (2008). Fourth generation RandD: Managing knowledge technology and innovation. John Wiley and Sons.
4. Dodgson Mark David M. Gann and Nelson Phillips eds. The Oxford handbook of innovation management, OUP Oxford , 2013.
5. Shane S. (Ed.), (2009). The handbook of technology and innovation management, John Wiley and Sons.

MB868 BUSINESS ANALYSIS AND ITC IN MANUFACTURING

Course Objectives
- The course provides the knowledge and necessary skills for carrying out business analysis in Manufacturing.
- The course provides knowledge to carry out IT integration projects in Manufacturing.

Course Content

Unit I IT in manufacturing
Trends in manufacturing industry - growth and opportunities - Global competition emerging concept of global supply chains - Global sourcing of raw material / components Reducing cycle times - increasing complexity in logistics - impact of industry consortiums new models of using IT manufacturing and SCM case studies.

Unit II ERP Concepts
Basics of ERP - vendors and modules - Context and developing business case for ERP ERP project formulation - selection of product and implementation partners - ERP implementation life cycle - CSF and Change management in ERP implementation - Manufacturing Execution System and their integration with ERP business system and other reporting systems.

Unit III ERP Implementation
Implementation strategies, MRP - Bill of Materials - Shop floor control - Sales configuration - Quality management - Purchase order management - Inventory management - production planning and control - Plant maintenance - case study.

Unit IV Business Process Reengineering
BPR Fundamental concepts - BPR methodology - Tools and techniques - Implementation strategies - Relevance of BPR in ERP/SCM implementation - case studies

Unit V SCM concepts and Implementation
SCM in manufacturing industry - Supply chain concepts - Push and Pull scheduling Make or Buy strategy - SCM framework - Managing global SCM - SCM products and vendors - SCM selection and implementation - Integration with ERP and Internet based marketing systems.

Course Outcomes

- Students will be able to analyse the business analysis problem scenario in Operations and Manufacturing domains.
- Students will have the knowledge to carry out IT integration projects Manufacturing domains.

Text and reference books

1. Alexis Leon, 'ERP: Enterprise Resource planning', Mc Graw Hill Education, 3rd Ed (2017).
2. V. K. Garg and N. K. Venkitakrishna, 'Enterprise Resource planning', PHI, 2nd edition, (2003).
3. V. Gover and W. J. Kettinger, Business Process Change Reengineering concepts, methods and technologies, Idea Publications, (1995).
4. S. Chopra and P. Meindl, "Supply Chain Management Strategy, Planning and Operation", 6th edition, Pearson, (2015).
5. Business Analysis Body of Knowledge, Ver. 3.0, International Institute of Business Analysis, (2015).

MB869 TECHNOLOGY MANAGEMENT

Course Objectives

- To introduce the students to the latest developments in managing technology including various techniques evaluation methods and intellectual property rights.
- To explore various approaches to technology forecasting including the use of experts and morphological analysis.
- To Understand the role of techno economic feasibility studies and multi criteria decision making techniques in evaluating and selecting technologies.
- To Examine the modes of global technology transfer including the technology human interface and organizational structures involved in technology implementation.

Course Content

Unit I Introduction
Definition - scope - components - History of technology developments - Issues in managing new technology   - Life cycle approach to technology management.

Unit II Forecasting
Approaches to forecasting - Technology performance parameters - Use of Experts in technology forecasting - planning technological process - Morphological analysis of a Technology system.

Unit III Decision Making Techniques
Techno Economic feasibility study - Application of multi criteria decision making techniques in technologies evaluation and selection - AHP - Fuzzy AHP.

Unit IV Technology Transfer
Modes of global technology transfer Technology - Human Interface - Organization structures and Technology Implementation issues in new technology.

Unit V Intellectual Property Rights
Introduction to IPR Act - Issues - the effectiveness and management of patents
Trademarks and copy rights.

Course Outcomes
- The syllabus covers the basics of technology management   including forecasting decision   making   technology transfer   and intellectual property rights.
- The course aims to provide students with foundational knowledge and skills to assess and implement technology solutions in different contexts   including multi   criteria decision making techniques and legal and ethical considerations.

Text and reference books
1. Gerard H. Gaynor,   'Handbook of Technology Management',   McGraw   Hill, (1996).
2. Alan L. Porter   A. Thomas Roper   Thomas Wimason   Jery Banks   and Fredrick A. Rossini ,'Forecasting and Management of Technology' 2nd Edition,   John Wiley and Sons   Inc.
3. Dorf   R. C. (1998), The technology management handbook. CRC Press.
4. Dodgson   M.   Gann   D. M.   and Salter   A. (2008). The management of technological innovation: strategy and practice. Oxford University Press.
5. Schilling   M. A. (2012). Strategic Management of Technological Innovation (4th Editio). McGraw Hill, Irwin.

MB870 INTRODUCTION TO BUSINESS ANALYSIS AND IT CONSULTING

Course Objectives
- To course provides the knowledge and necessary skills for carrying out business analysis in IT domain
- To course provide learning to create business value using various techniques associated with business analysis
- The course discusses the practical nuances of IT consulting

Course Content

Unit I Introduction and Enterprise Analysis
Trends in IS offshoring   emerging business models - Goal setting - business analyst strategic role - creating and maintaining business architecture - feasibility studies determining project scope - preparing business case - initial risk assessment - Define Business Need -   Assess Capability Gaps   Determine Solution Approach - Define Solution Scope -   Define Business Case preparing decision package.

Unit II BA Planning and monitoring
Plan Business Analysis Approach - Conduct Stakeholder Analysis - Plan Business Analysis Activities -   Plan Business Analysis Communication   - Plan Requirements Management Process - Manage Business Analysis Performance - selecting and prioritizing projects - launching new projects - tracking project benefits.

Unit III BA Elicitation and Communication

Prepare for Elicitation - Conduct Elicitation Activity - Document Elicitation Results Confirm Elicitation Results.

Unit IV BA Requirements Analysis

Prioritize Requirements - Organize Requirements - Specify and Model Requirements Define Assumptions and Constraints - Verify Requirements - Validate Requirements Manage Solution Scope and Requirements -   Manage Requirements Traceability - Maintain Requirements for Reuse - Prepare Requirements Package - Communicate Requirements signoff.

Unit V BA Techniques and competencies

Brainstorming - Business Rules Analysis - process modelling   - Data Modeling Document Analysis - Functional Decomposition - Interface Analysis - Interviews Organization Modeling - Prototyping - Requirements Workshops - Root Cause Analysis - Scenarios and Use Cases -   Sequence Diagrams - State Diagrams - Analytical Thinking and Problem Solving - Behavioral Characteristics - Business Knowledge - Communication Skills - Interaction Skills -   Software Applications.

Course Outcomes

- Students will be able to develop consulting framework for a given IT problem.
- Students will be able to understand the different stages of consulting waterfall methods and agile methods.
- Students will be able to apply appropriate techniques to develop IT frameworks.

Text and reference books

1. Business Analysis Body of Knowledge, Ver. 3.0, International Institute of Business Analysis, (2015).
2. H. Podeswa, The Business Analyst's Handbook, Cengage Learning, (2015).
3. D. Paul, D. Yeates, J. Cadle, Business Analysis, 3rd Edition, British Informatics Society, (2014).
4. Tony Morgan, Business Rules and Information Systems: Aligning IT with Business Goals, Addison Wesle.

MB871 SYSTEMS ANALYSIS AND DESIGN

Course Objectives

- The aim of this course is to provide students with an opportunity to learn the basic knowledge (knowing) and skills (doing) to design a computer information system.
- The course will focus on the system development life cycle (SDLC), by examining in detail the stages of SDLC employed by systems analysts in the analysis and design of organizational information systems.
- To enable students work with CASE tools in support of analysis and design stage.

<div align="center">**Course Content**</div>

Unit I System Development environment
Approach to System Analysis and design (SAD) - Methodology   System development Life
Cycle (SDLC) - Traditional model   Prototyping - Joint Application Design - Rapid
Application Development - Agile Methodologies - OOAD   System development Activities
Overview.

Unit II Planning
Identifying and Selecting System development Project -   Corporate and information System
Planning - Initiating and Selecting System development projects   Process   Assessing project
feasibility - Building and reviewing Baseline Project Plan.

Unit III Analysis
Requirements determination Methods - Structuring System Process requirements - Process
modelling - DFDs and Use Cases - Structuring System Logic requirements - Logic Modeling
Decision trees - Decision Table - OOAD Sequence and Activity diagrams - Structuring
System Data requirements -   Conceptual Data modelling - E R model - Degrees and
Cardinalities in relationships - Associative Entities - Supertypes and subtypes.

Unit IV Design
Designing databases - Relational DB model - Normalization - Transforming E R diagrams
into Relations - Merging relations - Design of forms and reports - Finalizing design
specifications.

Unit V Implementation and Maintenance
System implementation - System Application Testing - Installation - Documentation
Training and Support - Issue in System Implementation - Maintenance - Types of
Maintenance Cost - Managing Maintenance.

Course Outcomes
- To understand stages of system development and Apply appropriate Information
  Systems tools and techniques to create solutions to information systems problems.
- To analyze and develop process flow diagram (DFD's, E   R) and logic diagram and
  Use Case using UML) for system development.
- Write business document   Plan and undertake a minor project, prepare and deliver
  coherent and structured written technical system development report using learned tools
  at class.

Text and reference books:
1. Hoffer, George and Valacich, "Modern Systems Analysis and Design", 7th Edition,
   Pearson Education, (2014).
2. Joseph S. Valacich and Joey F. George, " Modern Systems Analysis and Design", 8th
   Edition , Pearson Education (2017)
3. Dennis, B. Haley, D. Tegarde, "Systems Analysis and Design with UML", 4th Edition,
   John Wiley and Sons, (2012).

MB872 SOFTWARE PROJECT MANAGEMENT

Course Objectives
- The course has been designed for students to acquire a working knowledge of software project management methodologies, tools, and techniques with a focus on planning and monitoring SPM activities.
- To use and application of tools to facilitate the software project management process (e.g. Microsoft Project, CASE tools, Cost estimation tools COCOMO, MTA…)
- To create an understanding on quality and risk issues in software project management

Course Content

Unit I SPM and Planning
Overview of SPM - SPM activities - Software Engineering Layers - SPM methodologies Common Process framework - People Process Technology Framework (PPT) - Project Planning: understanding Project scope and estimation - Software cost estimation - LOC (COCOMO) and Function points - Preparing Project scheduling - Documenting a Plan Project Plan review and Execution - Monitoring and Controlling - PMBOK.

Unit II Scheduling and Measurement
Scheduling Work Breakdown Structure (WBS) - Common Process Framework (CPF) Project Schedule preparation - Gantt Chart and Milestone Trend Analysis MTA - Network diagrams: PERT/CPM.

Unit III Monitoring and Control
Monitoring and Control of Project planning - SCRUM - Earned Value Management (EVM) CV, SV, CPI, SPI - Metrics for error tracking - Project Review: Inspection - Deskchecks, Walkthroughs - Code reviews - Pair Programming.

Unit IV Software Quality CMM
Software testing - Plans, Strategies and Validation - Software quality Attributes - Metrics and Indicators - Capability Maturity Model (CMM) - SQA activities - Quality standards and Certifications.

Unit V Software Configuration Management and Tools
SCM: Baselines Plan for change, Change request Management Risk management Process Cost Benefit analysis SPM Tools CASE Tools MS Project - Cost estimation tools (COCOMO) - MTA.

Course Outcomes
- To understand the process, methods, Measurements, quality, risk involved in Software project management.
- To understand the scenario of operations of software industry in software development.
- To work on s/w project planning, Scheduling, progress assessment and cost estimation using supporting tools to manage software projects (MS Project, CASE tools, MTA PROIT, COCOMO and so).

Text and reference books
1. Royce, Walker, Software Project Management - A unified Framework, 9th edition, Addison Wesley Professional, (2014).
2. Kelker, S. A, Software Project Management: A Concise Study, 3rd edition, PHI, (2012).
3. P. Jalote, Software Project management In Practices, Pearson Education India, (2016).
4. Richard H.Thayer (Edited), "Software Engineering Project Management*,* IEEE, John Wiley and Sons, 2nd edition, (2006).
5. B. Hughes, M. Cotterell, R. Mall, Software Project Management*,* 6th edition, McGraw Hill Education, (2017).

MB873 SOFTWARE QUALITY MANAGEMENT

Course Objectives
- The course provides adequate knowledge to frame quality software projects
- The course provides necessary skills needed to perform tasks to append the quality of the Software projects

Course Content

Unit I Quality Principles and Concepts
Vocabulary of quality in IT - Different views of quality - Quality concepts and practices - Quality Control and Quality Assurance - Quality Pioneers Approach to Quality - Quality Leadership - Leadership Concepts - Quality Management Infrastructure - Quality Environment.

Unit II Quality Baselines (Assessments and Models)
Quality Baseline Concepts - Methods Used for Establishing Baselines - Model and Assessment Fundamentals - Industry Quality Models - Quality Assurance Establishing a Function to Promote and Manage Quality - Quality Tools Process Deployment - Internal Auditing and Quality Assurance.

Unit III Quality Planning
Planning Concepts - Integrating Business and Quality Planning - Prerequisites to Quality Planning - The Planning Process - Define Build Implement and Improve Processes - Process Management Concepts - Process Management Processes.

Unit IV Quality Control Practices
Testing Concepts - Developing Testing Methodologies - Verification and Validation Methods - Software Change Control - Defect Management - Metrics and Measurement - Measurement Concepts - Measurement in Software - Variation and Process Capability - Risk Management - Implementing a Measurement Program.

Unit V Internal Control and Security
Principles and Concepts of Internal Control - Risk and Internal Control Model's Building Internal Controls - Building Adequate Security - Outsourcing, COTS and Contracting Quality - Quality and Outside Software - Selecting COTS Software - Selecting Software Developed by Outside Organizations - Contracting for Software Developed by Outside Organizations - Operating for Software Developed by Outside Organizations.

Course Outcomes
- Students will be able to evaluate and take up quality software projects.
- Students will be able to create quality metrics and frameworks to analyse the quality of the projects.

Text and reference books
1. P. Jalote, CMM in Practice: Processes for Executing Software Projects at Infosys, Addison, Wesley Longman Publishing, (2005).
2. The Capability Maturity Model: Guidelines for Improving the Software Process, Carnegie Mellon Univ. Software Engineering Inst., Addison, Wesley Professional, (1995).
3. M. C. Paulk, C. V. Weber, B. Curtis and M. B. Chrissis, The Capability Maturity Model: Guidelines for Improving the Software Process, Carnegie Mellon University, Software Engineering Institute, Addison Wesley, (2007).
4. D. Galin, Software Quality Assurance: From Theory to Implementation, Addison Wesley, (2003).
5. M. Haug, E. W. Olsen, L. Consolini, Software Quality Approaches: Testing, Verification, and Validation: Software Best Practice, Springer, (2001).

MB874 INTRODUCTION TO BUSINESS ANALYTICS

Course Objectives
1. To understand, fundamental techniques and tools of business analytics.
2. To impart knowledge of data driven decision making, interpretation, analysis and visualization in different business contexts.
3. To enhance students' critical thinking and problem solving ability by enabling them to analyze large volumes of data and formulate effective business strategies.

Course Content

Unit I Analytical Decision making
The nature of emerging business environment - Data as a strategic asset - analytical competition - embedding analytic in business process - Reporting / Descriptive Analytics, Modeling or Predictive analytics, Data Driven Strategies analytics and business performance - building analytical culture - Industry trends in analytics - review techniques and tools.

Unit II Data warehousing
Basic concepts of database - Introduction to data warehouse - Characteristics of DWH OLTP Vs OLAP Databases - Fact Table Vs Dimension Table - Concepts of Schemas ETL and Reporting tools - Data Cleaning, Data Integration and Transformation, Data Reduction - implementing approaches for data warehouse - data marts - case studies.

Unit III Translating Business context
The art and science of understanding business contexts - stages of enhanced analytics capabilities - defining metrics - categories and levels of metrics - defining KPIs - linking the strategic Outcomes and KPIs - use of KPI directories for different industry segments aligning technologies in the analytics domain - case studies.

Unit IV Data Analysis and Interpretation

Identifying core KPIs - Review of data analytics techniques choice of techniques - developing a hybrid model with specific tools - sourcing data - validating data and models using high level framework and integrating with tools - case studies.

Unit V Analytics Delivery

Balanced score card and other performance management systems - Report design and development - Data visualization - Dashboard - Business Activity Monitoring - Case studies.

Course Outcomes

- Students will acquire skills in using analytical tools such as Excel, SQL, and R for analyzing big data, creating reports, and communicating insights
- Students will develop proficiency in using software tools for data analysis.
- Students will interpret and draw inferences from data analysis results.

Text and reference books

1. Thomas H. Davenport; Jeanne G. Harris, Competing on Analytics: The New Science of Winning, (2007).
2. Turban, Aronson, King, Sharda "Business Intelligence", Pearson Publications, (2008)
3. Analytics at Work: Smarter Decisions, Better Results Tom Davenport, Jeanne G. Harris, Robert Morison (2010).

MB875 BASIC DATA ANALYTICS

Course Objectives

- Understand the basic concepts of data analytics and their application in business.
- Analyze data using statistical methods and software tools.
- Interpret the results of data analysis and make informed decisions based on them.
- Develop and validate the hypothesis using data.
- Use data to identify trends and patterns and make predictions

Course Content

Unit I Multiple Regression I

Assumptions for General Linear Regression Model -   Ordinary Least Square Approach measures of fit - statistical inferences - Hypothesis testing and interval estimation - Data cleaning - Outliers and influential observations.

Unit II Regression II

Dummy regressions and conjoint analysis - multi collinearity - Logistic regression Grouped Data - Weighted Least Square (WLS) -   Individual Data - Newton Raphson method - Error rate estimation.

Unit III Discriminant Analysis   I

Introduction - the Two Group problem - Variable contribution - The case of discrete Variables.

Unit IV Discriminant Analysis   II

The K groups problem -   Error rate estimate in multiple groups - Interpretation of multiple discriminant analysis solution - step wise selection of variables.

UNIT V Factor Analysis

The basic model - Extraction of factors - Principal factor - maximum likelihood method factor rotation - orthogonal - oblique rotations - Factor score - interpretations of factor analysis solutions.

Course Outcomes
- Students will understand the fundamentals of data analytics   including data types data sources   and data structures.
- Students utilize different statistical methods to analyze data and derive insights.
- Students can create and interpret data visualizations using tools
- Students will apply techniques for data   driven decision   making in various fields including business   healthcare   and social sciences.

Text and reference books
1. Damodar   N. Gujarathi, 'Basic Econometric' Tata McGraw Hill, 4 ed. 2004.
2. Naresh K Malhotra,   'Marketing Research' Pearson Prentice Hall, 4 ed. 2006.

MB876 BIG DATA ANALYTICS AND DATA SCIENCE

Course Objectives
- To provide the knowledge and necessary skills for taking up job roles in big data analytics.
- Determine suitable data analytics techniques for different business scenarios.
- Assess the applications of data science techniques in the field of management.

Course Content

Unit I Introduction to Big Data Analytics and Data Science
What is big data - Why big data matters - Big data and business case - Big data sources Machine data Vs Human generated data - drivers of big data   - Analytic data sets - Big data dimensions - Volume, variety and velocity - Industry examples of big data   - impact of cloud computing - Evolving concept of Data Science - learning from knowing - agility multidisciplinary focus   scale and convergence leading to Data Science - Data Scientist How is a data scientist different from a Statistician.

Unit II Theories and Methods
The evolution of big data analytics - Look (Search, Indexing and Memory) - Listen (Streams, Information and Language, Analyzing Sentiment and Intent) -   Learn (Classification, Clustering, and Mining, Information Extraction) - Connect (Reasoning: Logic and its Limits, Dealing with Uncertainty) -   Predict: Forecasting, Neural Models, Deep Learning Collaborative filtering - Large graph analysis - Text mining - Volume Trending - Influencer Identification -   In Memory Analytics.

Unit III Technology and Tools
Big data storage and computation - Massive Data Analytics: parallel algorithms - online learning algorithms - locality sensitive hashing - Hadoop and Map Reduce Paradigms - CAP Theorem - Introduction to NoSQL persistence layer and its importance to handle massive

data - Types of NoSQL databases - Column family, Graph, Name value pairs etc - H base /Cassandra /Neo4js -   Basic introduction to tools like R/Mahout/Giraffe - Building the big data capabilities - Security, compliance and auditing - data privacy and ethics.

Unit IV Big Data Analytics Components
Unsupervised feature learning and deep learning - Ontology - Similarity measures - Shingles and minhashing -   Locality sensitive hashing, Dimension reduction - Streaming - Clustering in high Dimensional Space - Web link analysis - Graph search, etc.

Unit V Applications of Big Data Analytics
Big data use cases in Digital Decoding consumer intent   - decoding customer sentiments from comments - Big data use cases in Telecom and location - based intelligence marketing Applications in CPG - Big data use cases in Utility banking and financial services   healthcare Internet retail.

Course Outcomes:
- Students will be able to determine suitable data analytics techniques for different business scenarios.
- Students will be able to analyze the theories and methods of data analytics.
- Students can assess the applications of data science techniques in the field of management.

Text and reference books:
1. F.J. Ohlhorst, Big Data Analytics: Turning Big Data into Big Money, Wiley, (2012).
2. J. Liebowitz, Big Data and Business Analytics, CRC Press, (2013).
3. M. Minelli, M. Chambers, and A. Dhiraj, Big Data Big Analytics, John Weily and Sons, (2013).
4. J. Stanton, Introduction to Data Science, Syracuse University, (2013).
5. Rajaraman, J. Leskovec and J. D. Ullman, Mining of Massive Data Sets, Cambridge University Press. (2011).
6. T. Hastie, R. Tibshirani, J. H. Friedman, The elements of statistical learning: data mining, inference and prediction, Springer, (2009).
7. K. Roebuck, Big Data: High   impact Strategies, Lightning Source Incorporated, (2011).
8. Franks, Taming the Big Data Tidal Wave, John Wiley and Sons, (2013).

MB877 ADVANCED DATA ANALYTICS

Course Objectives
- Understand and analyze complex data sets using advanced techniques such as statistical modeling.
- Apply data analysis techniques to various business scenarios   such as forecasting segmentation   and customer behavior analysis.
- Develop critical thinking and problem solving skills necessary to interpret and communicate data insights to stakeholders.
- Understand the ethical and legal implications of using data analytics in business and how to incorporate ethical considerations into their analytical practice

Unit I Principal component Analysis
Extracting Principal components - The geometry of principal components - deciding on how many components to retain - test of significance - component scores.

Unit II Canonical Correlation Analysis
Establishment of canonical variables - Establishment of canonical loading and its interpretation - Deriving cross loading and redundancy co-efficient and their interpretation.

Unit III Multidimensional scaling
Introduction, Proximities and Data collection - spatial map metric - nonmetric data - joint space analysis.

Unit IV Correlation analysis
Naming and interpreting the dimension using canonical correlation - attribute based perceptual mapping using factor analysis - spatial map using preference data through internal analysis and external analysis.

Unit V Cluster Analysis
Similarity measures - clustering techniques - hierarchical and partitioning methods graphical methods - assessing cluster solutions, implementation.

Course Outcomes
- Students can Gain proficiency in advanced statistical methods for analyzing complex data sets including regression analysis time series analysis and machine learning algorithms.
- Students develop a deep understanding of data visualization techniques including the use of interactive dashboards and storytelling techniques to communicate insights from data analysis.
- They would able to design and execute effective data collection and management strategies including the use of advanced survey methods.
- Students will develop critical thinking skills required for effective decision making based on data insights.

Text and reference books
1. Damodar N. Gujarathi 'Basic Econometrics', Tata McGraw Hill, 4 ed. 2004.
2. Naresh K Malhotra 'Marketing Research', Pearson Prentice Hall, 4 ed. 2006.

MB878 MACHINE LEARNING TECHNIQUES

Course Objectives
- Understanding of the fundamental concepts and techniques used in machine learning.
- Apply these techniques to real world problems analyze and interpret the results and communicate the findings effectively
- Strong foundation in statistical theory data preprocessing model selection and evaluation methods.

Course Content

Unit I Supervised Learning   I
Introduction to Machine Learning,   Types - Supervised Learning - Unsupervised Learning - Neural Network - Theoretical Background - Feed Forward Network -   Back propagation - Transfer functions and its types - List of Applications.

Unit II Supervised Learning   II
Support Vector Machine - Margin Maximisation - Primal and Dual form - solving by using Quadratic programming - Linearly separable case - Soft margin classifier -   kernel trick - kernel types - Linear,   polynomial,   RBF, Tan-h,   Nonlinear SVM.

UNIT III Supervised Learning   III
Bayesian Classification - Bayes Theorem - Priori and posteriori Probabilities - Naive Bayes Classification - K-NN   Theoretical Background - Determination of 'k' - Performance Measures for Supervised Learning Techniques - Confusion Matrix - Accuracy - Recall - Precision - F Measure - ROC - AUC - Rand Index - Jaccard Index.

Unit IV Unsupervised Learning   I
Types of Data in Cluster Analysis - Clustering Methods - Partitioning Methods - K- Means, K-Medoids - Hierarchical Methods - Agglomerative and Divisive.

Unit V Unsupervised Learning   II
Grid,   Model   Based Clustering Methods - EM algorithm, Self - Organizing Map - Statistical Information Clustering High - Dimensional Data - Clustering In QUEST, Projective clustering - Outlier Analysis.

Course Outcomes
- Students will understand the foundations of Machine Learning   such as statistical learning theory model selection   and cross   validation.
- Students will have a strong understanding of supervised and unsupervised learning techniques   including decision trees random forests   k   Nearest Neighbors Support Vector Machines   and clustering algorithms.
- The student knows how to clean and preprocess data   including handling missing data feature scaling and normalization.

Text and reference books
1. T. Hastie   R. Tibshirani   J. Friedman,   "The Elements of Statistical Learning" 2edition,   Springer, (2008).
2. Christopher Bishop,   "Pattern   Recognition   and   Machine Learning", 2edition,   Springer (2018).
3. Jiawei Han and Micheline Kamber   "Data Mining Concepts and Techniques" Morgan Kaufmann publication,   (2006).

MB879 ADVANCED MACHINE LEARNING TECHNIQUES

Course Objectives
- To examine the history and state of the art approaches to deep learning and hidden Markov models.
- To present the mathematical statistical and computational challenges of building stable representations for high dimensional data such as images text and data.
- To learn and apply the evolutionary and swarm intelligence algorithms.

Course Content

Unit I Random forests and Fuzzy clustering approaches
Decision Tree Induction: C4.5 Random Forests and ID3 - Rule Based Classification Fuzzy Clustering Methods - Fuzzy set approaches - Fuzzy C Means - Possibilistic C Means - Fuzzy Possibilistic C Means - Possibilistic Fuzzy C Means.

Unit II Hidden Markov models
Introduction - Structure - Forward and backward algorithm - Viterbi algorithm Identification of best path and Sequence - Applications.

UNIT III Deep Learning Basics
Deep Feed Forward network: Architectures - Gradient based Learning - Activation functions - regularizations and dropouts - Optimization for training deep models.

Unit IV Deep Learning Networks
Convolutional Neural Network - Architectures - Convolution, Pooling - Recurrent Neural Network - LSTM, GRU, Encoder - Decoder architectures - Deep Belief Network Architectures - RBN, Belief Nets.

Unit V Soft Computing Components
Neighbourhood based Algorithms: Simulated annealing - Tabu search - Evolutionary algorithms - Genetic algorithms, Genetic programming and Differential evolution - Swarm Intelligence: Ant colony optimization, Particle swarm optimization.

Course Outcomes
- Understand and apply advanced techniques for feature selection and feature engineering to enable effective machine learning models.
- Build and deploy different types of deep learning models like CNNs and RNNs for image processing natural language processing and graphical data analysis.
- Analyze and optimize machine learning models performance through model selection and validation techniques.

Text and reference books
1. Bengio Yoshua Ian J. Goodfellow and Aaron Courville. "Deep learning" An MIT Press book in preparation, (2015).
2. Bengio Yoshua. "Learning deep architectures for AI" Foundations and trends in Machine Learning, (2009).
3. Jiawei Han and Micheline Kamber, "Data Mining Concepts and Techniques" Morgan Kaufmann publication, (2006).

MB880 DATA MINING TECHNIQUES

Course Objectives
- To explore the concepts and techniques for the discovery of patterns hidden in large data sets and the application of techniques in various domains to students.
- To introduce students to various data mining techniques and their associated algorithms.
- To help students learn how to prepare and preprocess data for effective data mining.

Course Content

Unit I

Concepts - Scope and Objectives Data mining process - Data mining functionalities - Data preprocessing.

Unit II

Mining Frequent Patterns - Associations and correlations - Market Basket Analysis Efficient and scalable frequent item set mining methods - Mining various kinds of association rules - Association mining to correlation analysis - Constraint based association mining.

Unit III

Concepts - Classification by decision tree - Bayesian classification - Rule based classification - Support vector machines - Associative classification - Lazy learners Prediction - Accuracy and error measures - Evaluating accuracy of a classifier and predictor - Ensemble methods - Model selection.

Unit IV

Cluster analysis - Partitioning methods - Hierarchical methods - Density based method - Grid based method - Model based clustering - Outlier analysis - Examples.

Unit V

Data mining applications and cases using tools.

Course Outcomes
- Understand the basic concepts and techniques of data mining and its application to various domains.
- Analyze and preprocess data for effective data mining.
- Apply data mining tools and software to real world datasets and interpret the results.

Text and reference books
1. Han, J and Kamber, Data mining concepts and applications", 3rd Edition, Elsevier publications, (2011).
2. Margaret H. Dunham, "Data Mining: Introductory and Advanced Topics", Pearson Education, First Indian Reprint, (2003).
3. Weiss, S.M., Indurkhya, N., Zhang, T., Damerau, F, Text Mining, Predictive Methods for Analyzing Unstructured Information", Springer publications, (2005).
4. Anthony Scime, Web mining: applications and techniques, Idea Group publications, (2007).
5. Paolo Giudici, "Applied Data mining: Statistical methods for business and industry", John wiley and sons (2005).

MB881 GOOGLE ANALYTICS

Course Objectives
- To introduce various features and capabilities of Google Analytics.
- To provide a deeper understanding on the overview of analytics methodologies adopted by Google and for better understanding of customers and customization of channel.
- To analyze and interpret data from Google Analytics to inform business decisions.

Course Content

Unit I Introducing Google Analytics
Google Analytics - set up dashboards and filters - The Google Analytics layout - Dashboards - Basic Reporting Tools - Audience - Acquisition and Behaviour reports.

Unit II Basic Campaign and Conversion Tracking
Custom Campaigns measurement - Tracking campaigns with the URL Builder - Use of Goals to measure business Objectives - Google Ads campaigns measurement.

UNIT III Advanced Google Analytics
Data Collection using Google analytics - Categorizing into users and sessions - Storing data and generating reports - Creating a measurement plan - Set up advanced filters on views - Custom Dimensions and Custom Metrics - Understand user behaviour with Event Tracking.

Unit IV Advanced Analysis Tools and Techniques
Segment data for insight - Analyze data by channel audience and with Custom Reports - Best practices in doing for web analytics - case studies.

Unit V Attract High Value Traffic
Traffic sources - Improve site engagement - KPIs for content site - pages helping conversions - Driving forces for product purchases - Basics of Google Analytics 360 Rollup Reporting.

Course Outcomes
- Understand the fundamental concepts of web analytics and how Google Analytics fits into the larger analytics ecosystem.
- Create custom reports and dashboards in Google Analytics to meet specific business needs.
- Analyze and interpret data from Google Analytics to gain insights into website or app performance and user behaviour.

Text and reference books
1. Feras Alhlou, Shiraz Asif, Eric Fettman, "Google Analytics Breakthrough, From Zero to Business Impact", Wiley Publishing, (2016).
2. Justin Cutroni, "Google Analytics", O'Reilly Publishing (2010).
3. Clifton, B, Advanced Web Metrics with Google Analytics", Wiley Publishing, (2009).
4. Peterson, E, "Web Analytics Demystified: A Marketer's Guide to Understanding How Your Web Site Affects Your Business", Celilo Group Media and Café Press, (2005).

MB882 TEXT ANALYTICS

Course Objectives
•Upon the completion of this course, the students would know the types of problems to be solved through Text Analysis.
•The students will understand different methods for Information extraction and classification.
•The course aims to provide knowledge on using Text for Prediction and learning different operators through hands   on exercises in Python.

Course Content

Unit I Structured or Unstructured Data
How Text Differs from Numbers - Types of Problems Solved - Key Word Search - Nearest Neighbor   Methods - Measuring Similarity   - Web   Based Document Search - Document Matching - Evaluation of Performance.

Unit II Setting up libraries and creating data sources
Setting up libraries and creating data sources and in SAS Text Miner - Introduction to different text mining nodes   and their properties - Tokenization - Lemmatization - Vector Generation for Prediction   - Part   of   Speech   tagging   - Word Sense Disambiguation - Phrase Recognition - Named Entity Recognition.

Unit III Recognizing Documents Fit Pattern
Recognizing Documents Fit Pattern - Document Classification - Methods used for Prediction from Text - Evaluation of Performance - Clustering Documents by Similarity - Cluster's Labels - Applications - Evaluation of Performance.

Unit IV Levels of Analysis
Different Levels of Analysis - Sentiment Lexicon and its issues - Natural Language Processing issues - Opinion Summarization   - Sentiment Analysis.

Unit V Case Studies
Case studies on Social Network Marketing Application -   Different issues to be considered for text and sentiment analysis.

Course Outcomes
- Students will be able to apply creative problem   solving techniques for customer need analysis and arrive at innovative solutions.
- Students will understand different methods for Information extraction and classification.
- Students will be able to know the Text for Prediction and basics of Python.

Text and reference books
1. Dipanjan Sarkar, "Text Analytics with Python: A Practical Real   World Approach to Gaining Actionable Insights from Your Data" (2018).
2. Benjamin Bengfort, Rebecca Bilbro, and Tony Ojeda, "Applied Text Analysis with Python: Enabling Language   Aware Data Products with Machine Learning" (2018).
3. Thomas W. Miller, "Data and Text Mining: A Business Applications Approach" 1st Edition Publisher: Pearson.
4. G. Ignatow and R. Mihalcea, "Text Mining: A Guidebook for the Social Sciences", Sage Publishing.

MB883 DIGITAL ANALYTICS

Course Objectives
- To provide the knowledge and necessary skills for carrying out job roles in the domain of analytics in Internet based data.
- The course explores digital data analysis techniques and their theoretical foundations to help students acquire analytical skills that can be applied to real world problems.
- Compare and explain how to optimize social media analytics for products and services.

Course Content

Unit I Click stream Analytics
Search analytics - Engagement quantification frameworks   - Anonymous vs registered users' analysis   - Search engine optimization.

Unit II Social Network Analysis
Centrality - Tie Strength - Dyads - Social Capital / Structural Holes - Homophily - Online Communities - Community Detection - Diffusion in Networks.

Unit III Social Media Analytics
User generated content - Sentiment Analysis - Network link analysis - Text mining from opinion platforms   - Theme analysis - Overlaying text mining on segments.

Unit IV Design of experiments
Basic of DOE - Application of DOE to validate creative web design alternatives - Best practices in doing DOE for web analytics - case studies.

Unit V Applications of Digital Analytics
Promotional campaign (Ad gaming analysis) - The concept in brief   applications in CPG/ Telecom and retail context - Mining promotion data for targeted campaigns - print and media Entertainment etc.

Course Outcomes
- Students will be able to understand how data function adds value and demonstrates the value in business management.
- Students will be able to compare and explain how to optimize the different social media analytics for products and services.
- Students can assess the applications of digital analytics in the field of management.

Text and reference books:
1. Peterson, E. Web Analytics Demystified: A Marketer's Guide to Understanding How Your Web Site Affects Your Business, Celilo Group Media and Café Press, 2005.
2. Clifton, B. Advanced Web Metrics with Google Analytics, Wiley Publishing, 2009.
3. Ramos, A. and Cota, S. Search Engine Marketing, McGraw Hill Publishing, 2009.

MB884 DATA ANALYTICS SOFTWARE LAB

Course Objectives
- To provide hands   on exposure to various multivariate data analysis techniques using different software packages for managerial decision   making.
- Develop and Impart data coding and regression techniques using data analytics software.
- Utilize the analytical tools for factor analysis and structural equation modelling.

Course Content

Unit I Data Preparation and Data Coding
Data preparation and data coding - Overview of univariate - bivariate and multivariate data analysis techniques - Degree of Relationship among Variables - Screening Data Prior to Analysis - Missing Data - Outliers - Normality - Linearity and Homoscedasticity.

Unit II Multiple Regression
Multiple Regression   - Linear and Nonlinear techniques - Backward   Forward   Stepwise Hierarchical regression - Analysis of Variance and Covariance (ANOVA and ANCOVA) Multivariate Analysis of Variance and Covariance (MANOVA and MANCOVA) - Canonical correlation.

Unit III Logistic Regression
Logistic regression: Regression with binary dependent variable - Simple Discriminant Analysis, Multiple Discriminant analysis - Assessing classification accuracy - Conjoint analysis.

Unit IV Factor Analysis
Principal Component Analysis - Factor Analysis - Orthogonal and Oblique Rotation - Factor Score Estimation   - Multidimensional Scaling - Perceptual Map - Cluster Analysis.

Unit V Introduction to Structural Equation Analysis
Latent Variable Models an Introduction to Factor, Path, and Structural Equation Analysis.

Course Outcomes
- Students will be able to explain the fundamental concepts of data preparation and coding.
- Students will be able to compare and explain how to use multiple and logistic regression.
- Students can evaluate the data figures using factor analysis and structural equation modeling.

Text and reference books
1. Malhotra, N. K., Marketing research: An applied orientation, Pearson Education India,(2008)
2. Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L. (2013).Multivariate data analysis, Pearson India.

Required Software packages
R Studio, IBM SPSS, IBM AMOS, MS Excel, SAS.

MB885 GAME THEORY AND APPLICATIONS

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

Course Content

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

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

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

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

Unit V Applications
Voting - Voting Rules - Paradoxes - Strategic Manipulations - Bargaining - Nash Bargaining Solution - Ultimatum game - alternating - offers game - Threat Points Bargaining Shares - Auction.

Course Outcomes
- Students will be able to explain the fundamental concepts of game theories.
- Students will be able to examine how to utilize zero sum games.
- Students can evaluate the paradoxes and strategic manipulations and various game theory applications.

Text and reference books
1. Peter Morris, "Introduction to Game Theory" ,Springer Publications.
2. A Dixit, S. Skeath and D. Reiley, "Game of Strategy" ,W. W Norton and Co,3rd Edition.

MB886 COURSE OF INDEPENDENT STUDY

Student can choose any research topic or area for Course of Independent Study based on his/her functional domain interest. Student can choose his/her choice of the Faculty Guide within the department based on the research topic. This elective course will be offered during the Sixth Trimester.

MB887 INTELLECTUAL PROPERTY RIGHTS MANAGEMENT

Course Objectives
- To introduce the students to the concepts, practices, methods, management, and valuation of IPRs.
- Aims to impart the knowledge of patent rights to Intellectual property.
- To provide knowledge on international treaties and valuation.

Course Content

Unit I Introduction
History of IPRs - WIPO - TRIPS - Nature of Intellectual Property - invention to innovation - Patenting and development.

Unit II Patents
Indian Patent System - Procedure for grant of rights on intellectual property - Patenting under PCT - Patenting in foreign countries.

Unit III International Treaties and Conventions on IPRS
International Treaties and conventions on IPRs - The Indian IPR Acts - Bayh Dole Act and issues of academic entrepreneurship.

Unit IV Strategic Management of IPRS
Strategies followed before investing into Research and Development - Patent information and databases - IPR strength in India - Traditional knowledge.
Unit V Valuation
Concept of Ownership - IP valuation - Technology Transfer - Licensing.

Course Outcomes
- Students will be able to explain the fundamental concepts of Intellectual property rights.
- Students will be able to identify patent systems and conventions on IPRS.
- Students can evaluate the IP valuation and Licensing.

Text and reference books
1. Managing Intellectual Property by V. Sople Vinod (Prentice Hall of India Private Limited, Intellectual Property Rights and Copyrights, Publisher: Ess Publications, Seller: Indus International (2006).
2. R. Anita Rao and Bhanoji Rao, Intellectual Property Rights A Primer, Lastian Book Company.
3. Derek Bosworth and Elizabeth Webster, The Management of Intellectual Property Edited by, 2006, 341 pages, Edward Elgar Publishing Limited.

MB888 INFORMATION AND INTERNET ECONOMICS

Course Objectives
- The course internalizes economic principles relevant to the changing online economy.
- Aims to impart knowledge on product and pricing strategies.
- Helps students to understand how the rules of an auction or other trading mechanism can affect market prices and allocations.
- Make students familiar with online markets.

Course Content

Unit I E- Commerce Overview
Institutions - Business Models - Infrastructure - Building a Web Site.

Unit II Information Goods
Pricing - Versioning - Digital Media and Bandwidth - Rights Management.

Unit III Online Market Mechanisms
Lock In Services - Retailing - Network Effects - Portals and Communities - Business to Business - E Commerce - Auctions.

Unit IV Standards and Policy Issues
Standards Setting - Security and Encryption - Antitrust and Tax Policies.

Unit V Software Economics and Economics of Information Security
Misaligned Incentives - Security as an Externality - Economics of Vulnerabilities - Economics of Privacy - Fundamental improvements in software design and engineering through software economics.

Course Outcomes
- Students will be able to illustrate the basic concepts of information and the internet economy.
- Students will be able to analyse the online market mechanisms.
- Students can evaluate the software economics and economics of information security.

Text and reference books
1. Carl Shapiro and Hal R. Varian, Information Rules, Harvard Business School Press, (1998).
2. Kenneth C. Laudon and Carol Guercio Traver, E Commerce, Pearson Publication, 14th edition (2018).

MB889 INTERNATIONAL BUSINESS AND STRATEGY

Course Objectives
- This course is designed to deliver a big picture approach and introduces the field of International business strategy, strategic analysis, and development at the global level.
- It introduces the students to the Foreign Trade Policy of the country, incentives, financial assistance, and other institutional support made available to exporters and importers of the country which could be applied in their careers.
- The course students help the students to understand the methods of foreign capital investment and role of technology.

Course Content

Unit I International Business Environment

Globalization and Business - Institutional framework for International Business - WTO, Economic Integration - Global strategy - Phases of Global Strategy - Drivers of Global Strategy Perspective - Global Value Chain and Value System.

Unit II Designing Global strategy and Organization

Framework for Global Strategy - The Global Functional Model of Organization - Single and Multi-Business Global Organization - The Hybrid and The Transnational Models.

Unit III Global Strategic Development

Managing the International Process - Motives and Decision to Internationalization Process, Entry Mode Strategies - De Internationalization - International Strategic Alliances - Drivers - Needs - Motives - Pitfalls - Types of Alliance - Selecting and Managing Partners Balancing Trust and Risks - Alliance Dissolution.

Unit IV Subsidiary and Headquarter Level Strategy

Subsidiary- Level Global Strategy Levels - Strategic Roles of Subsidiaries - Types of Subsidiary - Level Strategy - Global Generic Strategies - Headquarter Level - The Role of Corporate Parent - Global Sourcing Strategies - Diversification Strategies - Managing Global Portfolios.

Unit V: Global Strategic Implementation and Control

Global Structures and Designs - Domestic Organizational Structures - Strategy and Structure of Multinationals - Balancing integrations and Local Responsiveness - Global Management of Change - Types of Change - The Change Process, Style of Change - Implementing Change - Communication Issues and Negotiations - Control Type - Model and Method.

Course Outcomes

- Students will be able to explain the fundamental aspects of International Business and the process of globalization.
- Students will be able to elaborate the role and functions of International Economic Institutions.
- Students will be able to analyze the methods of foreign capital investment and role of technology.

Text and reference books

1. K, Sundaram Anant, and Black J Stewart. The International Business Environment : Text and Cases. PHI Learning, NewDelhi (2012).
2. Lasserre., Philippe. Global Strategic Management 2e. Palgrave Macmillan, NewYork: (2007).
3. Mellahi, Kamel, Jedrzej George Frynas, and Paul Finlay, Global Strategic Management , Oxford University Press, New Delhi (2007).
4. Peng, Mike W. International Strategic Management, Cengage Learning India, NewDelhi(2009).
5. Rugman, Alan M, and Simon Collinson. International Business: A Strategic Management Approach 5e. Pearson Education Limited, Harlow (2009).
6. Verbeker, Alian. International Business Strategy.: Cambridge University Press, New Delhi (2009).

MB890 DESIGN THINKING AND BUSINESS INNOVATION

Course Objectives
- The primary Objectives of the course is to help students develop creative thinking skills key to innovation.
- Aims to gain deep insights about users (the core of design thinking), to define and reframe problems.
- The course try to generate business solutions or alternative approaches that are more effective than those that already exist.

Course Content

Unit I An Introduction to the Innovation Process
Define creativity and its role in innovation - overview of the innovation process - individual affective characteristics - Types of innovation -   critical dimensions of successful innovation barrier to innovation.

Unit II Human   Centered Design and Achieving Deep Customer Understanding
 Identify and understand what customers -   target users -   techniques for achieving deep customer understanding.

Unit III Identifying Opportunity Areas: Problem Framing and Definition
Framing   a powerful cognitive mechanism - problem frames and informed by insights - Deep customer understanding - reshape problem frames to open up new paths for thinking   redefine problems and identify areas of opportunity.

Unit IV Idea Generation and Concept Development
Approaches to innovative thinking and techniques for idea generation - Facilitating originality -Nominal Group Technique - Round Robin, and Creative Matrix - Systematic Inventive Thinking (SIT) approach and its tools - Role of prototyping - experimenting and iteration play in the development of ideas - Reliability versus Validity.

Unit V Implementation and Managing Innovation
Approaches for thinking creatively (and strategically) about implementing ideas - approaches to taking innovative ideas to the marketplace - Business Creativity within strategic boundaries.

Course Outcomes
- Students will be able to evaluate different models and perspectives on innovation.
- Students will be able to apply creative problem   solving techniques for customer need
- analysis and arrive at innovative solutions.
- Students will be able to set contemporary tools and methods for innovation and development.

Text and reference books
1. Nigel Cross, Design Thinking, BERG Publishing, (2011).
2. Thomas Lockwood, Design Thinking Integrating Innovation, Customer Experience and Brand Value, Design Management Institute (2009).

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