



# MCKV INSTITUTE OF ENGINEERING

NAAC Accredited "A" Grade Autonomous Institute under UGC Act 1956 Approved by AICTE & affiliated to Maulana Abul Kalam Azad University of Technology, West Bengal

243 G.T. Road (N), Liluah, Howrah-711204, West Bengal, India

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## Third Semester Syllabus

### COMPULSARY PAPER

<b>Course Name:</b>	<b>Strategic Management</b>		
<b>Course Code:</b>	MBA 301	<b>Category:</b>	Management Science and Humanities Courses
<b>Semester:</b>	First	<b>Credit:</b>	2
<b>L-T-P:</b>	2-0-0	<b>Pre-Requisites:</b>	To know the existence of management as a tool for making strategic decision
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

<b>Course Objectives:</b>	
1	To introduce the concepts of strategic management and understand its nature in competitive and institutional landscape
2	To understand Strategy formulation process and frameworks, tools and techniques of strategic analysis and its application.
3	To know Key business issues/challenges/problems of business in light of dynamic business environment.
4	Identification, appreciation and interpretation of the critical challenges and opportunities before an organization.

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Course Contents:		
Module No.	Description of Topic	Contact Hrs.
1	Introduction to competition, Strategy & Strategist and Process of Strategy	4L
2	Market, Environment & Competitive analysis, External Analysis, Internal Analysis, Solution Analysis, Competitive Advantage Porter's Forces, BCG Matrix, GE Matrix, Ansoff Matrix,	4L
3	Strategic Position and Dynamics: Competitive Advantage and Value Creation: Conceptual Foundations, Generic strategies, sustaining competitive advantage, business model & value chain	5L
4	Firm Boundaries/Scope of the firm (Corporate strategy), Boydian Thinking & OODA Loop, Evaluation of Strategic Alternatives, Case Study	4L
5	Industry specific strategy- Managing company & Govt. Organization, Managing Change, Risk & Uncertainty, Innovative & Disruptive Technology, Disruptive Innovation	3L
6	Strategy execution and leading change, Case Study	3L
7.	Corporate governance, Corporate Strategy & IT Analytics, New thinking in Strategic Management, Digital Strategy, Implementation	5L
<b>Total</b>		<b>28L</b>

Course Outcomes:	
1	Develop their capacity to think and execute strategically
2	Demonstrate capability of making their own decisions in dynamic business landscape.
3	Demonstrate effective application of concepts, tools & techniques to practical situations for diagnosing and solving organizational problems.

4	Developing and executing strategies and will appreciate its integrative and interdisciplinary nature.
5.	Demonstrate a clear understanding of the concepts, tools & techniques used, theories, background work, concept & research.

## Learning Resources:

1	Grant, M.A. (2010), Contemporary strategic analysis, John Wiley & Sons, Edition 8th (SIE)
2	Besanko, David, David Dranove, Mark Shanley and Scott Schaefer. 2009. Economics of strategy, 5th ed. John Wiley & Sons: New York.
3	Concepts in Strategic Management & Business Policy by Thomas L. Wheelen & J. David Hunger, Pearson
4	The Strategy Process by Mintzberg, Quinn, and Ghosal, Publishing House: Prentice Hall
5	Strategy and the business Landscape by Pankaj Ghemawat; Create Space Independent Publishing Platform, Pearson, Fourth Edition
6.	The Innovator's Dilemma by Clayton Christensen – Harvard Business Review Press
7.	Blue Ocean Strategy by W. Chan Kim and Renee Mauborgne, ISBN : 1625274491, Allbooksworld

## FINANCE MAJOR

<b>Course Name:</b>	<b>Corporate Finance</b>		
<b>Course Code:</b>	MBA FM-302	<b>Category:</b>	Management Science and Humanities Course
<b>Semester:</b>	Third	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic concept of Managerial Finance
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

### Course Objectives:

1.	To familiarize with the principles and techniques of financial management and taxation.
2.	To develop the analytic abilities in financial management and taxation.
3.	To apply the financial management knowledge and skills in decision-making process in organisations.

### Course Contents:

Module No.	Description of Topic	Contact Hrs.
1.	<b>Introduction</b> Corporate Finance – Nature and Scope - Role of Financial Institution - Valuation of the Firm Finance from international sources, financing of exports – role of EXIM bank and commercial banks– Finance for rehabilitation of sick units. Inflation and Financial Decisions.	10
2.	<b>Indian Capital Market</b> Basic problem of Industrial Finance in India, Fiscal Policies, Government Regulations affecting Capital Market – Role of SEBI – Stock Markets. Equity – Debenture financing – Guidelines from SEBI, advantages and disadvantages and cost of various sources of Finance <b>Foreign Collaboration</b> FDI and FIIS Business Ventures Abroad. International Financial Institutions & Multinational Corporations.	10
3.	<b>Investment Decision</b> Investment Analysis – Risk Analysis Probability Approach. Business Failures, Mergers, Consolidations and liquidation.	9
4.	<b>Basic Financial Concepts:</b> Capital Budgeting ;MIRR; Adjusted NPV Profitability Index; BCR; Working Capital with focus on Receivables & Inventory Management; Capital Structure decisions Dividend decisions	9
5.	<b>Emerging areas:</b> Treasury Management; Social Cost benefits of projects; Fintech, Private Equity, AIF ; Basic concepts of taxation	10
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1.	To analyze the governance decisions of a company and value projects using key capital budgeting techniques
2.	To discuss the trade-off firms face between tax advantages and various costs of debt
3.	To analyze options and their valuation methodologies and appreciate options as a tool to manage risk

## Learning Resources:

1	Brealey, R.A., Myers, S.C., Allen, F. and Mohanty, P., Principles of Corporate Finance, 10th Edition, Tata McGraw-Hill Publishers, 2012..
2	Damodaran, A., Applied Corporate Finance, 3rd Edition, Wiley, 2012.
3	Damodaran, A., Corporate Finance: Theory and Practice, 2nd Edition, Wiley India Pvt Ltd., 2007.
4	Kidwell, D. and Parrino, R., Fundamentals of Corporate Finance, Wiley India Pvt. Ltd., 2011
5	Madura, J., International Corporate Finance, 10th Edition, Cengage Learning, 2012
6	Viswanath, S., Cases in Corporate Finance, Tata McGraw-Hill Education, 2009.

<b>Course Name:</b>	<b>Security Analysis and Portfolio Management</b>		
<b>Course Code:</b>	MBA-FM-303	<b>Category:</b>	Management Science and Humanities Course
<b>Semester:</b>	Third	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic concept of Managerial Finance
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

## Course Objectives:

1.	To understand the empirical and theoretical implications of the financial environment and
2.	To develop and improve analytic abilities and valuation techniques on optimal portfolio management.
3.	To apply the knowledge and skills in decision-making process.

## Course Contents:

Module No.	Description of Topic	Contact Hrs.
1.	<b>INTRODUCTION</b> Investment - Concept of investment-importance-alternate forms of investment-LIC schemes bank deposits-government securities-mutual fund schemes-post office schemes-provident fund-company deposits-real estate-Gold and Silver. <b>RISK AND RETURN</b> Concepts of risk and return, measurement of risk is measured in terms of standard deviation and variance, the relationship between risk and return.	9

2.	<b>SECURITIES MARKETS</b> Investment Environment: Financial Market - Segments – Types - Participants in financial Market – Regulatory Environment, Primary Market – Methods of floating new issues, Book building – Role of primary market – Regulation of primary market, Stock exchanges in India – BSE, OTCEI, NSE, ISE, and Regulations of stock exchanges – Trading system in stock exchanges – SEBI.	8
3.	<b>FUNDAMENTAL ANALYSIS</b> Economic Analysis – Forecasting techniques. Industry Analysis: Industry classification, Industry life cycle – Company Analysis. Measuring Earnings – Forecasting Earnings – Applied Valuation Techniques – Graham and Dodds investor ratios.	8
4.	<b>TECHNICAL ANALYSIS</b> Fundamental Analysis Vs Technical Analysis – Charting methods – Market Indicators. Trend – Trend reversals – Patterns - Moving Average – Exponential moving Average – Oscillators – Market Indicators – Efficient Market theory.	10
5.	<b>PORTFOLIO MANAGEMENT</b> Portfolio analysis – Portfolio Selection – Capital Asset Pricing model – Portfolio Revision – Portfolio Evaluation	13
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1.	Analyze and evaluate financial markets, how securities are traded, mutual funds, investment companies, and investor behavior.
2.	Construct optimal portfolios and illustrate the theory and empirical applications of asset pricing models
3.	Explain macro and industry analysis, equity valuation, financial statement analysis and technical analysis
4.	Analyze bond prices and yields and fixed-income portfolios.
5.	Characterize the implications of the market efficiency evidence on active portfolio management.
6.	Explain what options and futures are and their use as hedging instruments.

## Learning Resources:

1.	Donald E. Fischer & Ronald J. Jordan, Security Analysis & Portfolio Management, PHI Learning, New Delhi, 8th edition, 2011.
2.	Prasanna Chandra, P., Investment Analysis and Portfolio Management, 4th Edition, Tata McGraw-Hill Education, 2012.
3.	Kevin, S., Security Analysis and Portfolio Management, PHI Learning, 2009.
4.	Khatri, D.K., Security Analysis and Portfolio Management, Macmillan Publishers India, 2010.
5.	Ranganathan, M. and Madhumathi, R., Security Analysis and Portfolio Management, 2nd Edition, Pearson, 2012.
6.	Reilly, F. and Brown, K. C., Analysis of Investments and Portfolio Management, 10th Edition, Cengage Learning, 2012.

Course Name:	Financial Markets and Services		
Course Code:	MBA-FM304	Category:	Management Science and Humanities Course
Semester:	Third	Credit:	4
L-T-P:	4-0-0	Pre-Requisites:	Basic concept of Managerial Finance
Full Marks:	100		
Examination Scheme:	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

## Course Objectives:

1.	To familiarize the students with the concepts and aspects of Indian financial system
2.	To develop the analytical skills, conceptual abilities and substantive knowledge in the Afore said field.

## Course Contents:

Module No.	Description of Topics	Contact Hrs.
1.	<b>Structure of Financial System</b> Role of Financial System in Economic Development – Financial Markets and Financial Instruments – Capital Markets – Money Markets – Primary Market Operations – Role of SEBI – Secondary Market Operations – Regulation – Functions of Stock Exchanges – Listing – Formalities – Financial Services Sector Problems and Reforms.	12
2.	<b>Financial Services</b> Concept, Nature and Scope of Financial Services – Regulatory Framework of Financial Services – Growth of Financial Services in India – Merchant Banking – Meaning-Types – Responsibilities of Merchant Bankers – Role of Merchant Bankers in Issue Management – Regulation of Merchant Banking in India.	10

3.	<b>Mutual Funds and Insurance</b> Concept and Objectives, Functions and Portfolio Classification, Organization and Management, Guidelines for Mutual Funds, Working of Public and Private Mutual Funds in India, Debt Securitisation – Concept and Application – De-mat Services - need and Operations-role of NSDL and CSDL. An analysis of Insurance markets in India, General Insurance, Life Insurance, Terms, Sum Assured, Motor Vehicle Insurance	13
4.	<b>Allied Financial Services</b> Venture Capital – Growth of Venture Capital in India – Financing Pattern under Venture Capital, Leasing – types of Leases – Evaluation of Leasing Option Vs. Borrowing, Credit Rating – Meaning & Functions, Insurance Services, – Factoring – Forfaiting - .Discounting.	10
5.	<b>Case Studies</b> Case studies on Financial markets and services	3
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1.	To understand the role and function of the financial system in reference to the macro economy.
2.	To demonstrate an awareness of the current structure and regulation of the Indian financial services sector.
3.	To evaluate and create strategies to promote financial products and services.

## Learning Resources:

1.	M Y Khan, “Financial Services”, TMH, 7th edition.
2.	Ravi M. Kishore, “Financial Management”, Taxmann’s, 6th edition.
3.	Bhole. L.M. and Jitendra Mahakud “Financial Institutions & Markets – Structure, Growth & Innovations”, TMH 5th edition.
4.	Anthony Saunders & Marcia Millon Cornett, “Financial Markets & Institutions”, TMH, 5th edition.

Course Name:		Mergers and Acquisitions	
Course Code:	MBA-FM305	Category:	Management Science and Humanities Course
Semester:	Third	Credit:	4
L-T-P:	4-0-0	Pre-Requisites:	Basic concept of Managerial Finance
Full Marks:	100		
Examination Scheme:	Semester Examination:70	Continuous Assessment:25	Attendance:05



## Course Objectives:

1.	To understand the role of mergers and acquisitions in firm's strategy.
2.	To know the main concepts related to managing mergers and acquisitions
3.	To be able to apply common frameworks and tools related to mergers and acquisitions.

## Course Contents:

Module No.	Description of Topic	Contact Hrs.
1.	<b>Mergers &amp; Acquisition</b> Introduction, Strategies, Building Values and Approaches to Mergers & Acquisition Strategy – Alternative Perspectives on Mergers – Formulating a Competitive Strategy, Expansion and Diversification Strategy, Deal Structuring and Negotiation, Payment and Legal Considerations	10
2.	<b>Types of Mergers</b> Horizontal Merger, Vertical Merger, Conglomerate Merger, Economic Rationale for Mergers, Managerial and Financial Synergy, Theories of Mergers and Tender Offers, Sell Offs, Divestitures, Spin Offs, Equity Carve Outs	9
3.	<b>Cross-Border Acquisitions</b> Objectives of Global M&A , Strategic Alliances as an Alternative to M&A, Organizing for Acquisitions, Sources and Limits of Value Creation in Cross-Border M&A, Bid Strategies and Defense Tactics	10
4.	<b>Regulatory Framework of Mergers &amp; Acquisition</b> Securities Trading and Takeovers, Disclosure Requirements, Risk Arbitrage in M&A Activity, Insider Trading, Post-Acquisition Audit and Organizational Learning	10
5.	Post merger Integration and strategies related to it. Recent Trends and Developments in Mergers & Acquisitions Practices	9
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

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|----|---|
| 1. | To know about business expansion strategies.  |
| 2. | To gain the knowledge from different live cases on Mergers & Acquisitions and their complexities. |

## Learning Resources:

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|----|--|
| 1. | Abdol S. Soofi (2014), Global Mergers and Acquisitions: Combining Companies across Borders. Business Expert Press. |
| 2. | Andreas Lachmann (2014), Globe Business Publishing Ltd. Globe Business Publishing Ltd                              |
| 3. | Weston Fred J. et al, "Mergers, Restructuring and Corporate control", PHI, Delhi.                                  |

## BUSINESS ANALYTICS MAJOR

<b>Course Name:</b>	<b>Artificial Intelligence and machine Learning</b>		
<b>Course Code:</b>	MBA-BA302	<b>Category:</b>	Business Analytics
<b>Semester:</b>	Third	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Programming Knowledge, Algorithm Design
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

<b>Course Objectives:</b>	
1	To understand the basic concepts of AI and its use as optimization technique.
2	To understand different search strategies and Resolution in AI.
3	To understand classification and clustering methodology
4	To understand Deep Learning Paradigms.

<b>Course Contents:</b>		
<b>Module No.</b>	<b>Description of Topic</b>	<b>Contact Hrs.</b>
1.	Introduction to AI, Machine Learning, AI Vs Machine learning Vs. Deep Learning	3
2.	Production Rules, State Diagram, Search Techniques BFS, DFS, DLS, Iterative Deepening etc.	5
3..	Heuristic search Strategy like Hill Climbing, Best First Search, A* search etc. Concept of fuzzy Logic.	5
4.	Concept of Probabilistic Reasoning, Dempster Shafer theory, concept of False Positive and False Negative, Bayes Theorem, Genetic Algorithm concept as an optimization, Resolution with Proposition and Predicate Logic	6
5	Introduction to Machine Learning, Difference between Supervised and unsupervised learning, Linear regression and Logistic regression, LMM Model, Multivariate Logistic Regression, Distance based methods, Nearest Neighbor, Naïve Bayes, SVM	6

6	Model Selection and Optimization, Decision Trees, Ensembles and Other Techniques with Case Study. PCA and Kernel PCA	7
7.	Forecasting Techniques using Time Series, Unsupervised Learning Clustering,	6
8.	Matrix Factorization and Matrix Completion, Generative Models (mixture models and latent factor models)	5
9.	Deep Learning - Neural Network Basics, Shallow Neural Network and Deep Neural Network with Case Study.	5
<b>Total</b>		<b>48</b>

## Course Outcomes:

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

1	Differentiate between the components of AI and Machine Learning
2	Compare & Contrast between several AI searching strategies and different optimization techniques.
3	Investigate different supervised and unsupervised learning techniques.
4	Explain Matrix Factorization and different Deep Learning Techniques.

## Learning Resources:

1	Artificial Intelligence- Ritch & Knight TMH
2	Machine Learning – Tom Mitchell
3	Deep Learning with Python Paperback- François Chollet (Author)
4.	Pattern Recognition & Machine Learning – C.M. Bishop (Springer)

<b>Course Name:</b>	<b>Introduction to Data Science</b>		
<b>Course Code:</b>	MBA-BA303	<b>Category:</b>	Business Analytics
<b>Semester:</b>	Third	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic understanding of data
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination:70	Continuous Assessment:25	Attendance:05

## Course Objectives:

1	Study the fundamental theories, principles and techniques of data science.
2	Examine real world examples and cases to place data science techniques in context.
3	Develop data-analytic thinking.
4	Illustrate that proper application is as much an art as it is a science.

<b>Course Contents:</b>		
<b>Module No.</b>	<b>Description of Topic</b>	<b>Contact Hrs.</b>
I	Introduction to Data Science – Evolution of Data Science – Data Science Roles – Stages in a Data Science Project – Applications of Data Science in various fields – Data Security Issues.	8
II	Data Collection and Data Pre-Processing Data Collection Strategies – Data Pre-Processing Overview – Data Cleaning – Data Integration and Transformation – Data Reduction – Data Discretization.	8
III	Exploratory Data Analytics (EDA) Descriptive Statistics – Mean, Standard Deviation, Skewness and Kurtosis – Box Plots – Pivot Table – Heat Map – Correlation Statistics – ANOVA.	8
IV	Model Development Simple and Multiple Regression – Model Evaluation using Visualization – Residual Plot – Distribution Plot – Polynomial Regression and Pipelines – Measures for In-sample Evaluation – Prediction and Decision Making.	8
V	Model Evaluation Generalization Error – Out-of-Sample Evaluation Metrics – Cross Validation – Overfitting – Underfitting and Model Selection – Prediction by using Ridge Regression and Lasso Regression, Elastic net – Testing Multiple Parameters by using Grid Search.	8
VI	Real Life Project on regression starting from Questionnaire generation, Data collection, Data Pre-Processing, EDA, Model Selection & Development and Model Evaluation using visualization.	8
<b>Total</b>		<b>48L</b>

<b>Course Outcomes:</b>	
After completion of the course, students will be able to:	
1	Incorporate data science principles to address data-dependent questions in the humanities, social sciences, and sciences.
2	Apply basic exploratory analysis to identify abnormalities in data (i.e., missing values, outliers, redundant features, etc.)
3	Anticipate and identify ways in which sampled data may be biased
4	Prepare data sufficient for answering a range of research questions across liberal arts disciplines
5	Identify the appropriate set of algorithms for a given problem statement, and give an appropriate analysis of the pros/cons of each for the problem at hand
6	Apply the appropriate set of visualizations techniques to underline stories in Data.

## Learning Resources:

1	Jojo Moolayil, "Smarter Decisions : The Intersection of IoT and Data Science", PACKT, 2016.
2	Cathy O'Neil and Rachel Schutt, "Doing Data Science", O'Reilly, 2015.
3	David Dietrich, Barry Heller, Beibei Yang, "Data Science and Big data Analytics", EMC 2013
4	Raj, Pethuru, "Handbook of Research on Cloud Infrastructures for Big Data Analytics", IGI Global.

<b>Course Name:</b>	<b>Principles of Programming using Python</b>		
<b>Course Code:</b>	MBA-BA304	<b>Category:</b>	Business Analytics
<b>Semester:</b>	Third	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic concepts of computer
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

## Course Objectives:

1	Learn the fundamentals of writing Python scripts with control structures
2	Learn Python data structures concept with handling of files
3	Learn to build robust code by handling errors and exceptions properly
4	Understand the Object oriented concept of Python
4	Learn the data visualization elements using Python

## Course Contents:

Module No.	Description of Topic	Contact Hrs.
1	<b>Introduction:</b> History, Features, Setting up path, Working with Python, Basic Syntax Variable and Data Types, Operator	4
2	<b>Conditional and looping Statements:</b> If, If- else, Nested if-else, Looping, For, While, Nested loops <b>Control Statements:</b> Break, Continue, pass	5
3	<b>String Manipulation :</b> Accessing Strings, Basic Operations, String slices, Function and Methods	5

4	<b>Lists :</b> Introduction, Accessing list, Operations, Working with lists, Function and Methods <b>Tuple:</b> Introduction, Accessing tuples, Operations, Working, Functions and Methods <b>Dictionaries:</b> Introduction, Accessing values in dictionaries, Working with dictionaries, Properties	8
5	<b>Functions :</b> Defining a function, Calling a function, Types of functions, Function Arguments, Anonymous functions, Global and local variables, Recursion, Some recursive codes, Recursion vs Iteration	4
6	<b>Exception Handling :</b> Exception, Exception Handling, Except clause, Try , finally clause, User Defined Exceptions	4
7	<b>The Object-Oriented Approach:</b> Basic concepts of object oriented programming, Implementation of Properties of Object-oriented Programming, Inheritance	6
8	<b>File Handling :</b> Introduction to File Handling, Data Files, Opening and Closing Files, Reading and Writing Files	4
9	<b>Data Visualization using Python:</b> Concept of Data Visualization, Using Pyplot of Matplotlib library, Creating Line chart, Bar chart and Pie chart using pyplot interface, Customizing the Plot; Business Application of python and real life case Studies	8
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	Apply different structures of the Python language to solve problems
2	Apply different Python function to solve problems
3	Solve different real life problems using object oriented concepts
4	Apply data visualization techniques to draw some insights from the data

## Learning Resources:

1	"Core Python Programming" by R.Nageswar Rao
2	"Python: the complete reference" by Martin C. Brown
3	"Let us Python" by Yashvant Kanetkar

<b>Course Name:</b>	<b>Database Management System</b>		
<b>Course Code:</b>	MBA-BA 305	<b>Category:</b>	Business Analytics
<b>Semester:</b>	Third	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic Concepts of Computer, Set Theory of Mathematics
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

## Course Objectives:

1	To understand the different issues involved in the design and implementation of a database system.
2	To study the physical and logical database designs, database modeling, relational, hierarchical, and network models
3	To understand and use data manipulation language to query, update and manage a database.
4	To develop an understanding of essential DBMS concepts such as: database security, integrity and concurrency.

## Course Contents:

Module No.	Description of Topic	Contact Hrs.
01	<b>Introduction</b> Introduction and applications of DBMS, Purpose of data base, Data, Independence, Database System architecture- levels, Mappings, Database, users and DBA.	04
02	<b>Entity Relationship Model</b> Basic Concepts, Constraints, Keys, Design Issues, Entity Relationship Diagram, Weak Entity Sets, Extended E-R Features and Design of an E-R Database Schema Reduction of an E-R Schema to Tables.	05
03	<b>Relational Model</b> Structure of Relational Databases, The Relational Algebra, Extended Relational Algebra Operations, Modifications of the Database Views, The Tuple Relational Calculus, The Domain Relational Calculus.	04
04	<b>SQL</b> Basics of SQL, DDL, DML, DCL, structure – creation, alteration, defining constraints – Primary key, foreign key, unique, not null, check, IN operator, Functions - aggregate functions, Built-in functions – numeric, date, string functions, set operations, sub-queries, correlated sub-queries, Use of group by, having, order by, join and its types, , Any, All, view and its types. transaction control commands – Commit, Rollback, Savepoint.	08
05	<b>Relational Database Design</b> First Normal Form, Pitfall of Relational-Database Condition, Functional Dependencies, Decomposition, Desirable Properties of Decomposition, Boyce-Codd Normal Form, Third Normal Form.	08



06	<b>PL/SQL Concepts</b> Introduction to Cursors, Stored Procedures, Stored Functions, Database Triggers, Error Handling, Package	04
07	<b>Overview of Storage and Indexing</b> Data on External Storage – File Organization and Indexing – Cluster Indexes, Primary and Secondary Indexes – Index data Structures – Hash Based Indexing – Tree base Indexing.	02
08	<b>Transaction Management</b> Transaction concepts, properties of transactions, serializability of transactions, testing for serializability, System recovery, Two- Phase Commit protocol, Recovery and Atomicity, Log-based recovery, concurrent executions of transactions and related problems, Locking mechanism, deadlock, two-phase locking protocol.	06
09	<b>Database System Architecture</b> Centralized and Client-Server Architectures, Server System Architectures, Parallel Systems, Distributed Systems	02
10	<b>A case-study for application of Database Knowledge</b> Develop a database for a real world system such as a banking system or an Academic Institution or A production unit of a factory etc.	05
<b>Total</b>		<b>48 L</b>

## Course Outcomes:

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

1	Understand database concepts (Flat-file vs. RDBMS), data-storage and query language
2	To design and build a simple database system and demonstrate competence with the fundamental tasks involved with modeling, designing, and implementing a DBMS
3	Understand Functional Dependency and Functional Decomposition.
4	Apply various Normalization techniques
5	Perform PL/SQL programming using concept of Cursor Management, Error Handling, Package and Triggers
6	Apply the knowledge of advanced SQL queries related to Transaction Processing & Locking using concept of Concurrency control in different Database Architectures

## Learning Resources:

1	A Silberschatz, H Korth, S Sudarshan, "Database System and Concepts"
2	R. Elmasri and S.B. Navathe, "Fundamentals of Database Systems"
3	C. J. Date, "An Introduction to Database Systems"
4	Raghu Ramakrishnan, Johannes Gehrke, "Database Management Systems"
5	Rob, Coronel, "Database Systems"

## MARKETING MAJOR

<b>Course Name:</b>	<b>Integrated Marketing Communication</b>		
<b>Course Code:</b>	MBA MM 302	<b>Category:</b>	Marketing management
<b>Semester:</b>	3	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	General management knowledge.
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

<b>Course Objectives:</b>	
1	To understand role of IMC in marketing mix.
2	To understand role of sales promotion in IMC.
3	To examine the process by which IMC programme is planned and developed.

<b>Course Contents:</b>		
<b>Module No.</b>	<b>Description of Topic</b>	<b>Contact Hrs.</b>
1	<b>Introduction to Integrated Marketing Communication:</b> What is traditional marketing? Definition, features and role of IMC and its relation with marketing program Concept, Evolution of IMC, Reasons for Growth and Features. Promotional Tools for IMC, IMC Planning Process, Communication Process, AIDA and Hierarchy of Effect Model, Establishing Objectives and Budgeting: Determining Promotional Objectives, Sales vs. Communication Objectives, DAGMAR, Problems in Setting Objectives, and Setting Objectives for the IMC Program. one voice communication V/s IMC. Introduction to IMC tools Advertising, sales promotion, publicity, public relations, and event sponsorship	8L
2	<b>Elements of IMC: Sales Promotion:</b> Different Types of Sales Promotion, Advantages and Disadvantages. Public Relation and Publicity – Types of PR, Process, Advantages and Disadvantages, Types of Publicity, Direct Marketing – Features, Advantages and Disadvantages, Personal Selling – Features, Advantages and Disadvantages, Advertising – Features, Advantages and Disadvantages, New Trends in IMC, International Media.	6L
3	<b>Public Relations and Corporate Advertising:</b> Definition, New role of PR, Objectives, tools and techniques of public relations with merits and demerits, corporate advertising- scope and types, role of PR in IMC programme.	4L
4	<b>Evaluation of Promotional Effectiveness:</b> Reasons to measure effectiveness, What, when, where, how to test, Testing methods – pretesting and post testing techniques, Essentials of effective measures, Problems with current methods, Measuring effectiveness of other promotion.	5L

5	<b>Advertisement: Introduction to Advertising:</b> Definition, features and role of advertising, Relationship of advertising with other promotional mixes and marketing mix elements, Various forms of Advertising: (national, retail, cooperative, trade, industrial financial, corporate, public services, political)	4L
6	<b>Advertising Industry:</b> Advertisers, Advertising agencies and support organizations, Types of agencies, Structure, role and functions of ad agencies, Agency compensation and evaluation.	2L
7	<b>Developing the Integrated Marketing Communication Programme:</b> Planning and development of creative marcom. Creative strategies in advertising, sales promotion, publicity, event sponsorships etc. Creative strategy in implementation and evaluation of marcom- Types of appeals and execution styles. Media planning and selection decisions- steps involved and information needed for media planning. Measuring the effectiveness of all Promotional tools and IMC. Case Study	5L
8	<b>Execution frameworks: for print and electronic media:</b> Copy writing, body copy, headlines, layout, visuals, slogans, logos, signatures, storyboards. Social Media marketing: Concept, role and features of SMO, SEO, Facebook, Twitter, LinkedIn, youtube as means of marketing Communication.	6L
9	<b>Social Media marketing:</b> Concept, role and features of SMO, SEO, Facebook, Twitter, LinkedIn, youtube as means of marketing communication, Regulatory aspects of advertising – ASCI. Mobile Advertising, E-PR Advertising Laws & Ethics: Advertising & Law, Advertising & Ethics, Pester Power, Intellectual Property Rights, ASCI Case Study	6L
10	Case Study on aspects of IMC	2L
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	Know how IMC fits into the marketing mix.
2	Understand how the communications process fits into and works with consumer behavior with emphasis on the consumer decision making process.
3	Develop an awareness of the connection between marketing communications tools, and how each can be used effectively- individually or in an integrated mix.
4	Obtain a practical, real-world application of IMC theory.

## Learning Resources:

1	Contemporary Advertising: Arens W.F.; TMH
2	Advertising and Promotion: Belch G.E. and Belch M.A; TMH
3	Integrated Advertising, Promotion and Marketing Communications: Clow K.E., Baack D.; Pearson
4	Advertising and Integrated Brand Promotion: O'Guinn T. C., Allen C.T.; South Western

5	Understanding Digital Marketing: Damian Ryan, Pearson
6	Advertising and Integrated Marketing Communication by Kruti Shah, Mc Graw Hill Education Edition
7	Advertising, Promotion, and Other Aspects of Integrated Marketing Communications by Terence A. Shimp, J. Craig Andrews Publisher: South West Cengage Learning

<b>Course Name:</b>	<b>Advertising and Sales Management</b>		
<b>Course Code:</b>	MBA-MM 303	<b>Category:</b>	Sales Management
<b>Semester:</b>	3	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	General Management knowledge.
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

## Course Objectives:

1	Demonstrate an awareness and understanding of the history of advertising.
2	Demonstrate an understanding of how an advertising agency operates.
3	Demonstrate an understanding of companies; advertising strategies and budgets.
4	To find out the social, economic and legal implications of advertisement

## Course Contents:

Module No.	Description of Topic	Contact Hrs.
1	<b>Advertisement:</b> Introduction to Advertising: History of advertising, Definition, features and role of advertising, Relationship of advertising with other promotional mixes and marketing mix elements, Various forms of Advertising: (national, retail, cooperative, trade, industrial, financial, corporate, public services, political). Social, Economic and Legal Implications of Advertisements – setting advertisement objectives – advertisement campaign	7L
2	<b>Advertising Industry:</b> Advertisers, Advertising agencies and support organizations, Types of agencies, Structure, role and functions of ad agencies, Agency compensation and evaluation. Advertising Planning and Budgeting: Planning process, steps, situation analysis, objective setting, budgeting, developing promotional strategies, implementation and control, Budgeting approaches – different methods, allocation of budget. Media plan – type and choice criteria – reach and frequency of advertisements – cost of advertisements related to sales – media strategy and scheduling.	7L
3	<b>Designing an Advertisement:</b> Different dimensions, Importance of creativity to advertising, Creative process, developing a creative brief, Message Strategies: Message structure, Message appeals- rational, emotional, Message source-credibility, attractiveness, power. Internet Advertising- Meaning, types, components, Advantages, Limitations.	8L

4	<b>Testing for advertising effectiveness:</b> Ethical and social issues in advertising; Case Studies	4L
5	<b>Introduction to sales management:</b> The selling process, Managing Sales Information, Sales Organization, Managing of sales territory, Management of Sales Quota	6L
6	<b>Recruitment and selection of sales force:</b> training of sales force, sales force compensation. Evaluation and controlling of sales force. Major tools of sales promotion- samples point of purchase, displays & demonstrations, exhibitions & fashion shows, sales contests & games of chance and skill, lotteries gifts offers, premium and free goods, price packs, rebates patronage rewards. Conventions, conference & trade shows, specialties and novelties.	7L
7	<b>Developing sales promotion programme:</b> pre-testing implementing, evaluation of results and making necessary modifications ; Careers in Advertising & Sales Promotions Distribution Channel Management, Evolution of Marketing Channels, Retailing, wholesaling, Measuring Wholesale Performance, Franchising. Channel Information System, Logistics and SCM, IT and Logistics & SCM, Performance Measures.	9L
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	To understand the nature, role, and importance of brand management and advertising in marketing strategy
2	To understand effective design and implementation of advertising strategies.
3	To present a general understanding of content, structure, and appeal of advertisements.
4	To understand the concept of sales management.
5	to examine the elements of an effective sales force as a key component of the organization's total marketing effort..

## Learning Resources:

1	Contemporary Advertising: Arens W.F.; TMH
2	Advertising and Promotion: Belch G.E. and Belch M.A; TMH
3	Understanding Digital Marketing: Damian Ryan, Pearson
4	Advertising and Sales promotion : SH Hkazmi and Satish K. Banra,
5	Sales & Distribution Management (Latest Edition), Panda Tapan K., Sahadev Sunil, Oxford University Press.
6	Sales & Distribution Management – Text & Cases (2nd Edition), Krishna K. Havaladar, Vasant M. Cavale, Tata McGraw-Hill.
7	Sales & Distribution Management, Dr. S. L. Gupta, Excel, Latest Edition
8.	Advertising Management-Aaker, Myers, Batra
9	Advertising and Sales Promotion by S.K. Sarangi, Asian Books Pvt. Ltd.
10	Scientific Advertising by Claude Hopkins, by Ingram Short Title

<b>Course Name:</b>	<b>Service Marketing and CRM</b>		
<b>Course Code:</b>	MBA-MM 304	<b>Category:</b>	Marketing management
<b>Semester:</b>	3	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Marketing management knowledge.
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

## Course Objectives:

1	Understand the Concept of Services and intangible products
2	Understand emerging service environment in India and the world.
3	Understand CRM process and customer relationship management.

## Course Contents:

Module No.	Description of Topic	Contact Hrs.
1	<b>Service Concept:</b> Definition, Characteristics of services, Tangibility continuum, Marketing mix for services, Different types of service sectors, – traditional and new, Service experience – Four Categories of Services People Processing, Mental Processing, Possession Decision Making – Processing, and Information Prepurchase Stage, Service Stimulus Processing;; Customer Encounter Stage and Post Encounter Stage; Customer Expectations and Perceptions of Services; moments of truth, zone of tolerance. Role of services in the economy;	8L
2	<b>Service Strategy Planning:</b> Understanding the customer and competition, Positioning services, Service triangle concept; Distinguish Approx. Percentile weightage actions between Services and Goods; Services and Technology, technology in service encounter, emergence of self service, automation in services	4L
3	<b>Creating the Service Product:</b> Creating service product, Customer value hierarchy, Flower of service, Service product mix, Branding service products.	4L
4	<b>Service Marketing Pricing and Communications:</b> Approaches to pricing of services, Elements of promotional mix for services	4L
5	<b>Designing and Managing Service Demand and Capacity:</b> Designing service delivery system, Delivery through Intermediaries, Franchising, Electronic Channels, Self-Service Technologies; Service blue printing, Customer as co-producer, Capacity constraints, Demand patterns, Strategies for matching capacity and demand, Wait lines and reservations.	7L



6	<b>Expanded Marketing Mix:</b> People – Employees' Role in Service Delivery, Service Leadership and Culture, Process – Service Blueprinting, Service Process Redesign Physical Evidence – Service scape, Service Environments, Managing Capacity and Demand: Understanding Capacity, Demand Patterns, Strategies for Matching Capacity and Demands Different Services: Nature and characteristics of financial, hospitality, health-care, educational & professional, logistics, entertainment services.	5L
7	<b>CRM Definition, Need and Importance:</b> Conceptual Framework of Customer Relationship Management ; The Value Pyramid , Customer Interaction Cycle , Customer Profiling and Total Customer Experience, Goals of a CRM Strategy and Obstacles, CRM Solutions Map.	4L
8	<b>CRM</b> Issues and Strategies; Winning Markets through Effective CRM; CRM as a business strategy, CRM Process, Effective Customer Relation Management through Customer Knowledge Management.	4L
9	<b>Status of Customer Relationship Management in service industry in India:</b> Relevance of CRM for Hospital Services; Customer Relationship Management in Banking and Financial Services; CRM in Insurance Sector, Supply-Demand Mismatches and their impact on CRM; The Past, Present and Future of CRM	6L
10	<b>Case Studies on CRM and Services; Practical Implications of CRM</b>	2L
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	Understand the Concept of Services and intangible products
2	Discuss the relevance of the services Industry to Industry
3	Examine the characteristics of the services industry and the modus operandi
4	Apply the concept of CRM, the benefits delivered by CRM, the contexts in which it is used, the technologies that are deployed and how it can be implemented.
5	Design customer relationship management strategies by understanding customers' preferences for the long-term sustainability of the Organizations.

## Learning Resources:

1	Zeithaml, V.A., Bitner, M J, Gremler, D.D. & Pandit, A.: Service Marketing, TMH
2	Rao, K.R.M.: Services Marketing, Pearson Education
3	Rajendra Nargundkar, Services Marketing: Text & Cases, Tata McGrawHill Publishing Company, New Delhi, 2008
4	Srinivasan R.: Services Marketing; PH
5	Jagdish N Sheth, Parvatiyar Atul, G Shainesh, Customer Relationship Management: Emerging Concepts, Tools and Applications, 1st Edition, Tata McGraw Hill, June 2008
6	Judith W .Kincaid , Customer Relationship Management Getting it Right, Pearson Education

7	Services- Marketing, Operations, and Management, Jauhari & Dutta, Oxford
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<b>Course Name:</b>	<b>Product and Brand Management</b>		
<b>Course Code:</b>	MBA- MM305	<b>Category:</b>	Marketing Management
<b>Semester:</b>	3	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	General Marketing knowledge.
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

## Course Objectives:

1	Increase the understanding of the important issues in planning and evaluating product and brand strategies.
2	Provide “real world” experience and understanding of product and branding strategies and understand product and branding concepts from the consumer’s point-of-view.
3	Understand the work with the appropriate theories, models and other tools to ensure better branding decisions, and to make these concepts relevant for any type of organization.

## Course Contents:

Module No.	Description of Topic	Contact Hrs.
1	<b>Product Concepts:</b> Introduction to Product: Competition & Product Strategy, product in theory & in practice Product Mix concepts, Product Classification. Product Planning: Marketing Plan, Portfolio Analysis, Market Potential and forecasting	6L
2	<b>Product Management:</b> New product strategy, commercialization, managing Growth, Managing the mature Product Market Strategies. New Product Development, Product Life Cycle Stages and corresponding Strategies, Product Evaluation, Product Modification, Line Extension & Brand Extension.	8L
3	<b>Managing Brand:</b> Creating brands in a competitive market, Concept & function of Brand Management, Brand creation, Brand Name, Brand attributes, awareness, loyalty, Personality association, brand extension, co-branding, branding commodities	4L
4	<b>Strategic Brand Management Process:</b> developing brand strategy Positioning concept, positioning statement, positioning process and steps; Brand Identity, Roles of brand, building Brand image, Brand dimensions	6L



5	<b>Planning &amp; Implementing Brand Marketing Programs:</b> Criteria for Choosing Brand Elements, Options & tactics for Brand Elements, Use of IMC for Brand Building, Leveraging Secondary Brand Associations to Brand building	6L
6	<b>Brand Equity:</b> Concept of brand equity, Brand equity vs brand value, brand equity benefits, brand review, brand value, creating brand equity and brand value. Products Developing a Brand Equity Management System. Measuring Sources of Brand Equity and Brand Equity measurement approaches	5L
7	<b>Brand Personality:</b> Concept, advantages, importance of brand personality, brand personality and user imaging. Brand ambassadors, Brand promise; Launching Brand Extensions	3L
8	<b>Brand Communication:</b> Understanding branding objective, brand communication strategy mapping brand strategy with IMC, Media strategy.	3L
9	<b>Global Brands:</b> Concept of global brand, benefits, advantages of global branding, building on successful global branding global brand strategy. Managing brands overtime and Geographic boundaries	3L
10	<b>Case studies</b>	4L
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	Understand the product policy, product mix, product line, product modification and deletion.
2	Know the innovation, theories, models, process of new product development.
3	Examine the different growth strategies of new product and product portfolio analysis.
4	Familiarize the different concepts of product map joint space map and joint mapping.

## Learning Resources:

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

## HUMAN RESOURCE MAJOR

<b>Course Name:</b>	<b>Employment Relations &amp; Labour Laws</b>		
<b>Course Code:</b>	<b>MBA-HR302</b>	<b>Category:</b>	Elective-HRM
<b>Semester:</b>	3rd	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic Knowledge of HRM
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

<b>Course Objectives:</b>	
1	Make the learner aware about the concept of industrial relations
2	To make the learner understand the concept of industrial disputes
3	To make the learner aware about the various legislations in working environment

<b>Course Contents:</b>		
<b>Module No.</b>	<b>Description of Topic</b>	<b>Contact Hrs.</b>
1	<b>Introduction:</b> Background of Employee Relations, Concept, Definition, Scope, Objectives, Factors, Participants & Importance of ER, Approaches to Employee Relations – The Dunlop's Approach, The Social Action Approach, The Human Relations Approach and The Gandhian Approach, Labour Policies, Role of ILO and its Influence on Legislation in India.	8
2	<b>The mechanism for Harmonious ER:</b> Collective Bargaining - Definition, Meaning, Nature, Essential Conditions, Functions and Importance, Process and its Implementation, Workers Participation in Management & Problem Solving Attitude, Grievance, Meaning and Forms, Sources, Approaches, Procedures, Model Grievance Procedure and Grievance Handling Committees.	10
3	<b>Legislations Governing Employee Relations:</b> The Industrial Disputes Act 1947 – Definition of Industry, Workmen and Industrial Dispute, Authorities Under the Act, Procedure, Powers and Duties of Authorities, Strikes and Lockouts, Layoff, Retrenchment and Closure, The Contract Labour (Regulation and Abolition) Act 1970 – Advisory Boards, Registration of Establishment, Licensing of Contractors, Welfare and Health of Contract Labour, Registers and Other Records to be Maintained.	10

4	<b>Legislation Governing Unions and Wages:</b> The Trade Union Act 1926- Formation and Registration of Trade Unions, Principle Privileges of a Registered Trade Union, Rights of Recognised Trade Unions, Types and Structure of Trade Unions, Impact of Globalisation on Trade Union Movement, Maharashtra Recognition of Trade Union and Prevention of Unfair Labour Practices Act 1971 – Unfair Labour Practices on the Part of Employers and Employees, Authorities and Punishments Under the Act, Minimum Wages Act 1948 – Definition of Wages, Fixation and Revision of Minimum Wages, Advisory Boards and Committees, Fixing Hours for a Normal Working Day, Wages for Worker Who Works for less than Normal Working Day, Maintenance of Registers and Records	10
5	<b>Legislation Governing Working Environment:</b> The Factories Act 1948 – Definitions of Factory, Manufacturing Process, Worker, Occupier; Provisions Under Health, Safety and Welfare, Working Hours, Annual Leave with Wages, Prohibition of Employment of Young Children, Maharashtra Shops & Establishment (Regulation of Employment and Conditions of Service) Act, 2017 – Scope, Registration of Establishments, Opening and Closing Hours, Hours of Work, Interval for Rest, Spread Over, Wages for Overtime and Weekly off, Leave with Pay and Payment of Wages and Welfare Provisions, Offences and Penalties, Maternity Benefit Act, 1961 – Entire Act and Latest Amendment, The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 – Definitions of Sexual Harassment, Employee, Workplace, Complaints Committee, Complaint Mechanism, Aggrieved Woman, Chairperson; Constitution of Internal Complaints Committee, Complaint, Inquiry into Complaint, Duties of Employer.	10
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	Understand the concept of industrial relations
2	Apply the relevant laws related to working environment
3	Aware of fair and unfair labour practices
4	Understand the grievance handling mechanism in an organizational setting

## Learning Resources:

1	B. Pai, Labour Law in India (2001)
2	L.Malik, K.D. Srivastava's Law Relating to Trade Unions and Unfair Labour Practices in India (4 <sup>th</sup> ed., 2002, with Supplement 2003)
3	D. Srivastava, Industrial Employment (Standing Orders) Act, 1946 (4 <sup>th</sup> ed., 1998 with Supplement 2003)
4	Industrial Relations - Ramaswamy
5	Industrial Relations - T. V. Rao

<b>Course Name:</b>	<b>Compensation and Rewards Management</b>		
<b>Course Code:</b>	MBA-HR303	<b>Category:</b>	Elective-HRM
<b>Semester:</b>	3rd	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic Knowledge of HRM
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination:70	Continuous Assessment:25	Attendance:05

## Course Objectives:

1	Compensation and reward system it must get approval from the govt. or top management in the organization.
2	Useful information about the latest thinking and developments compensation must be sufficient so that needs of the employees are fulfilled substantially
3	New realities of how organizations are approaching the vital tasks of managing for rewards and developing the capabilities of their people.

## Course Contents:

Module No.	Description of Topic	Contact Hrs.
1	<b>The reward system :</b> compensation & non compensation dimension, system for non-compensation; Compensation- theoretical dimension, economic and behavioral; designing the pay model, strategic compensation plan; wage and salary administration at the macro level; Minimum Wage, Fair Wage and Living Wage– Understanding Elements of Compensation Structure, Fixed Pay, Variable Pay, Cash Benefits, Incentives, Executive Compensation, Stock Options; consolidated pay, stipend, service charges, pay scales, severance pay, terminal benefit, bonus, joining bonus, retention bonus, relocation pay, increment, and stagnation increment. Understanding Salary Slip; CTC Method	7
2	<b>Job analysis and evaluation:</b> Broad , generic job (class descriptions versus Narrow, specific job (Position) descriptions, A job contract, Planning, operations and control, elements of the job description, Job summary; Job requirements and pay, whole job ranking, position classification, Predetermined grading Approach, a market pricing approach, a maturity curve method, Development and use of compensable factors,. Weighting and rating of compensable factors	7
3	<b>Designing a Base pay structure Pay structure architecture:</b> Determining a pay policy line, the need for more than one pay structure, displaying job data, identifying lowest and highest rates of pay, developing pay grades, single rate pay grade, two tier wage plan, multiple point pay structure, range or spread dimension, pay grade width, determining pay grade minimum and minimum rates of pay, internal design consideration, spread of range and steps, pay grade overlap, broad banding	7

4	<b>Measuring and paying for performance merit pay:</b> cost- effectiveness analysis, designing a job content-based performance appraisal program, Rating scale design and development, performance standards, maintaining an employee documentation File; Point factor method of job evaluation: Combining point factor and factor comparison methods, job evaluation committee, Using FES to determine job worth, Factor evaluation system position evaluation statements	7
5	<b>Short term incentives:</b> Premium and differentials, pay for unit produced, individual based bonus and rewards, organization wide short term incentives, Scanlon plan, lincon's incentive system	3
6	<b>Long term incentives:</b> Designing a long- term incentive and deferred compensation plan, Qualified deferred compensation arrangement, Social security, retirement plan, pension plans, profit sharing plan, stock bonus plan, ESOP, employer benefits and employer costs for ESOP, Individual retirement account, Savings incentive match plan for Employees	4
7	<b>Wage and salary administration at the micro level job evaluation:</b> definition, traditional and new techniques; wage boards, pay commissions, compensation management in multinational organizations. establishing a link with performance appraisal and compensation management. Compensation package according to current lifestyle and new thinking in the new millennium	4
8	<b>Managerial remuneration pays commission:</b> performance-based pay system incentives, executives "compensation plan and packages; Executive compensation in an international context – Employee benefits around the world - CEO pay in a global context - Beyond compensation	3
9	<b>Strategic Reward:</b> Concept, Aims– Strategic Reward and Reward Management– Purpose and Contents of Reward Strategy– Communicating reward strategy – Implementing reward strategy	3
10	<b>Module VI Law Relating to compensation:</b> Payment of wages Act 1936, Minimum wages Act 1948, Payment of Bonus Act 1965, and Equal Remuneration Act 1976. Taxation on salary and benefits: Meaning and significance of taxation on salary, Professional tax of state government on salaries people, income tax of central government on salaries people. Components of salary and benefits which are exempted from payment of tax.	3
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	Analyze the contribution of a compensation system to the effectiveness of an organization and identify opportunities for improvement of those systems.
2	Design performance pay and indirect pay plans necessary to attract, retain and motivate the workforce
3	Analyze different types of rewarding procedure of employees on the basis of performance.
4	Summarize some similarities and differences between financial and non-financial benefits for the employees.
5	Recognize how pay decisions help the organization achieve a competitive advantage.

## Learning Resources:

1	Dr. Vinay Ojha, "Compensation and Reward Management" 7th Edition, 2019.
2	Pradip Kumar Das "Compensation and Reward Management", "Himalaya publishing house", in 2019.
3	George Milkovich, "Compensation and Reward Management", McGraw-Hill Higher Education, 2019.
4	Sharma RC, "Compensation and Reward Management", 2017
5	Ojha Vinay, "Compensation and Reward Management", 2016
6	Richard.i. Henderson, "Compensation Management in a Knowledge Based World", Prentice-hall, 1st Edition, 2001
7	Edward.e. Lawler, "Rewarding Excellence (pay strategies for the new economy)", Prentice-hall, 1st Edition, 2004
8	B D Singh, "Compensation and Reward Management", Sterling Publishers (P) Ltd, Kindle Edition, 2001.
9	Tapomoy Deb, Compensation Management, Text and Cases, Excel Books, 2009, 1st Edition

<b>Course Name:</b>	<b>Performance management and competency mapping</b>		
<b>Course Code:</b>	MBA-HR304	<b>Category:</b>	Elective-HRM
<b>Semester:</b>	3rd	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic Knowledge of HRM
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

## Course Objectives:

	This course will help students to understand the significance of Performance Management System and give an in depth understanding into the fundamentals of Competency Management and Development of Competency maps It will also develop an understanding of various Competency based HRM Processes to manage the performance of employees
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Course Contents:		
Module No.	Description of Topic	Contact Hrs.
1	<b>Introduction to Performance Management:</b> Objectives of P A, Issues and Problems in P A, Job Description and PA, Job Analysis in P A Systems, Historical Review of PA , Research Findings in P A in India and abroad, Conceptual Approach to Performance Management, Determinants of Job Performance, Goal setting, KRA, KPIs, Components of Effective Performance Management, Performance planning- Theories of goal setting, Goal setting theory, Expectancy theory , setting of performance criteria, process of setting performance criteria, Process of Performance Planning, Performance Management Cycle, Designing of Performance Management Systems. Case Discussion	10
2	<b>Process of Performance Appraisal and Establishing PMS:</b> Components of Performance Management System, Performance planning, Ongoing support and coaching, Performance measurement and evaluation, Performance management and appraisal , Methods of Performance Appraisal, Appraisal Communication, Performance Review Discussion , RSDQ Model, Counseling, Identifying potential for development, Implications of Management Styles on P A, Implementation and Issues in Performance Management, Strategies and Challenges; Characteristics of effective performance metrics, Role of HR Professionals in Performance Management, Barriers to performance planning- Organizational & Individual. Case Discussion	10
3	<b>Introduction to Competency:</b> Introduction: Concept and definition of Role and Competency, Characteristics of competency, Core Competency, Competency versus competence, Performance versus Competency, Skills versus Competency, Behavior indicators, Types of competencies - Generic/Specific, Threshold/Performance, and differentiating and technical, managerial and human.. Case Discussion	8
4	<b>Competency Management Framework:</b> Competency framework - Development of Competency Framework, Lancaster Model of Managerial Competencies, Understanding job positions, Data collection instruments for job descriptions, Validation of the competency model after Data Gathering, Stages in design and implementation of competency model, Competency Dictionary, BEI for Competency Mapping. Experiential Exercises I - Use of FIRO B to measure competency for Interpersonal Skills	8

5	<b>Development of Competency Maps and Integration of Competency based HRM:</b> Steps in development of competencies map - Studying Job, Processes, and Environment, Studying attributes of Star Performers, Strategy Structure Congruence, Ensure non repetitive tasks in two different roles, Identifying Knowledge, Skills and Traits for each Job for creating Competitive Advantage, Creating Competency Map using Competency Matrix. Competency based HRM - Using Competency maps for Competency profiling - Job competency profiling, Role competency profiling, Functional competency profiling, Competency based Selection, Competency based Interviews, Competency based Performance Management System, Competency based Training and Development, Competency driven Career Planning, Competency linked Remuneration, Development of Assessment Centres. Experiential Exercises II - Competency Assessment – Assessment Centre Tools ( In Basket Exercises, Role Plays, Competency Based Interviews (CBI) using Situation, Task Action, Result) STAR method Use of technology and e-PMS, Current Performance Management and Competency mapping practices in Indian organizations, Relevance of Competency Mapping in different Sectors, Role of Artificial Intelligence in screening of Talent, Competencies needed to work in Gig economy, Flexible and Virtual workforce, Role of Leadership in Competency Assessment for effective Talent Management Case Discussion	12
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	Understand the role of Performance and Competency Management in enhancing Professional Excellence
2	Apply the Competency based HRM systems in the organizations.
3	Create, analyze and evaluate the role of Psychometric Personal Profiling for Professional Excellence
4	Create the Competency Maps for different Organization Profiles.

## Learning Resources:

1	Armstrong, Michael and Berron, Angela (2008), Performance Management and Development, Jaico Publications
2	Murphy and Cleaveland: Performance Appraisal, Sage Publication
3	Performance Management: Strategies, Interventions and Drivers, Prentice Hall of India
4	Herman Aguinis: Performance Management, Pearson Education
5	Rao T V (2008), Performance Management and Appraisal Systems-HR Tools for Global Competitiveness, Response Books
6	Cardy Robert L. (2008), Performance Management Concepts, Skills and Exercises, Prentice Hall India Sahu R K (2007), Performance Management System, Excel Books
7	Sanghi, Seema. The Handbook of Competency Mapping: Understanding, Designing and Implementing Competency Models in Organizations, 2nd e, Sage Publications Pvt. Ltd 2007
8	Competency Mapping: A pre- requisite for HR Excellence - by Dr. Lovy Sarikal



<b>Course Name:</b>	<b>Manpower Training and Development</b>		
<b>Course Code:</b>	MBA-HR305	<b>Category:</b>	Elective-HRM
<b>Semester:</b>	3rd	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic Knowledge of HRM
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

## Course Objectives:

	The development of an organization's human resources is becoming more critical as an organization attempts to survive in an increasingly turbulent, dynamic, and competitive global marketplace. This course will examine the role of human resource development in maintaining an organization's competitive position in today's environment. In doing so, it will identify assessment techniques that will assist the manager in determining the general training needs of the organization and the specific needs of the employees and it will introduce practices that help managers to successfully transfer training to the workplace so that organizational efficiency and effectiveness improve. The course will also examine special topics of interest, such as diversity training and career management.
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## Course Contents:

Module No.	Description of Topic	Contact Hrs.
1	<b>Concept of training-characteristics of effective training system:</b> inter linkages – nature of training and development- importance of training and development – Training process - Organization vision & perspective plans, assessment of training needs, setting training objectives and developing training policy and plan - designing training programmes – conducting or Implementation of training programmes- evaluation of training	12
2	<b>HRD-Macro Perspective:</b> HRD Concept, Origin and Need, HRD as a Total System; Approaches to HRD; Human Development and HRD; HRD at Macro and Micro Climate. HRD-Micro Perspective: Areas of HRD; HRD Interventions Performance Appraisal, Potential Appraisal, Feedback and Performance Coaching, Training, Career Planning, OD or Systems Development, Rewards, Employee Welfare and Quality of Work Life and Human Resource Information; Staffing for HRD: Roles of HR Developer; Physical and Financial Resources for HRD; HR, Accounting; HRD Audit, Strategic HRD	10
3	<b>Instructional Technology for HRD:</b> Learning and HRD; Models and Curriculum; Principles of Learning; Group and Individual Learning; Transactional Analysis; Assessment Centre; Behaviour Modeling and Self Directed Learning; Evaluating the HRD	8

4	<b>Human Resource Training and Development:</b> Concept and Importance; Assessing Training Needs; Designing and Evaluating T&D Programmes; Role, Responsibilities and challenges to Training Managers.	8
5	<b>Training Methods: Training with in Industry (TWD):</b> On the Job & Off the Job Training; Management Development: Lecture Method; Role Play; In-basket Exercise; Simulation; Vestibule Training; Management Games; Case Study; Programmed Instruction; Team Development; Sensitivity Training; Globalization challenges and Strategies of Training Program, Review on T&D Programmes in India.	10
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	Research and describe recent approaches to training and development.
2	Apply theories of learning to the training function.
3	Describe what an effective employee training and development program should look like
4	Develop a training module.
5	Ascertain by what method to design and implement training and development processes to enhance the effectiveness of individuals, teams, and organizations

## Learning Resources:

1	Title: Employee Training & Development (8th edition, 2020) Author: Raymond A. Noe
2	Nadler, Leonard : Corporat Human Resource Development, Van Nostrand Reinhold, ASTD, New York .
3	Rao, T.V and Pareek, Udai: Designing and Managing Human Resource Systems, Oxford IBH Pub. Pvt.Ltd., New Delhi , 2005.
4	Viramani, B.R and Seth, Parmila: Evaluating Management Development, Vision Books, New Delhi .
5	Kapur, Sashi: Human Resource Development and Training in Practice, Beacon Books, New Delhi .
6	Silberman, M. (Mel). (2015). Active training: A handbook of techniques, designs, case examples, and tips. (any edition). San Francisco, CA: Pfeiffer. ISBN: 9781118972014

## FINANCE MINOR

<b>Course Name:</b>	<b>Corporate Finance</b>		
<b>Course Code:</b>	MBA FM-302	<b>Category:</b>	Management Science and Humanities Course
<b>Semester:</b>	Third	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic concept of Managerial Finance
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

<b>Course Objectives:</b>	
1.	To familiarize with the principles and techniques of financial management and taxation.
2.	To develop the analytic abilities in financial management and taxation.
3.	To apply the financial management knowledge and skills in decision-making process in organisations.

<b>Course Contents:</b>		
<b>Module No.</b>	<b>Description of Topic</b>	<b>Contact Hrs.</b>
1.	<b>Introduction</b> Corporate Finance – Nature and Scope - Role of Financial Institution - Valuation of the Firm, Finance from international sources, financing of exports – role of EXIM bank and commercial banks.– Finance for rehabilitation of sick units, Inflation and Financial Decisions.	10
2.	<b>Indian Capital Market</b> Basic problem of Industrial Finance in India, Fiscal Policies, Government Regulations affecting Capital Market – Role of SEBI – Stock Markets. Equity – Debenture financing – Guidelines from SEBI, advantages and disadvantages and cost of various sources of Finance <b>Foreign Collaboration</b> FDI and FIIS Business Ventures Abroad. International Financial Institutions & Multinational Corporations.	10
3.	<b>Investment Decision</b> Investment Analysis – Risk Analysis Probability Approach. Business Failures, Mergers, Consolidations and liquidation.	9
4.	<b>Basic Financial Concepts:</b> Capital Budgeting ;MIRR; Adjusted NPV Profitability Index; BCR; Working Capital with focus on Receivables & Inventory Management; Capital Structure decisions Dividend decisions	9
5.	<b>Emerging areas:</b> Treasury Management; Social Cost benefits of projects; Fintech, Private Equity, AIF ; Basic concepts of taxation	10
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1.	To analyze the governance decisions of a company and value projects using key capital budgeting techniques
2.	To discuss the trade-off firms face between tax advantages and various costs of debt
3.	To analyze options and their valuation methodologies and appreciate options as a tool to manage risk

## Learning Resources:

1	Brealey, R.A., Myers, S.C., Allen, F. and Mohanty, P., Principles of Corporate Finance, 10th Edition, Tata McGraw-Hill Publishers, 2012..
2	Damodaran, A., Applied Corporate Finance, 3rd Edition, Wiley, 2012.
3	Damodaran, A., Corporate Finance: Theory and Practice, 2nd Edition, Wiley India Pvt Ltd., 2007.
4	Kidwell, D. and Parrino, R., Fundamentals of Corporate Finance, Wiley India Pvt. Ltd., 2011
5	Madura, J., International Corporate Finance, 10th Edition, Cengage Learning, 2012
6	Viswanath, S., Cases in Corporate Finance, Tata McGraw-Hill Education, 2009.

<b>Course Name:</b>	<b>Financial Markets and Services</b>		
<b>Course Code:</b>	MBA-FM304	<b>Category:</b>	Management Science and Humanities Course
<b>Semester:</b>	Third	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic concept of Managerial Finance
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

## Course Objectives:

1.	To familiarize the students with the concepts and aspects of Indian financial system
2.	To develop the analytical skills, conceptual abilities and substantive knowledge in the aforesaid field.

## Course Contents:

Module No.	Description of Topic	Contact Hrs.
1.	<b>Structure of Financial System</b> Role of Financial System in Economic Development – Financial Markets and Financial Instruments – Capital Markets – Money Markets – Primary Market Operations – Role of SEBI – Secondary Market Operations – Regulation – Functions of Stock Exchanges – Listing – Formalities – Financial Services Sector Problems and Reforms.	12

2.	<b>Financial Services</b> Concept, Nature and Scope of Financial Services – Regulatory Framework of Financial Services – Growth of Financial Services in India – Merchant Banking – Meaning-Types – Responsibilities of Merchant Bankers – Role of Merchant Bankers in Issue Management – Regulation of Merchant Banking in India.	10
3.	<b>Mutual Funds and Insurance</b> Concept and Objectives, Functions and Portfolio Classification, Organization and Management, Guidelines for Mutual Funds, Working of Public and Private Mutual Funds in India, Debt Securitisation– Concept and Application – De-mat Services - need and Operations-role of NSDL and CSDL. An analysis of Insurance markets in India, General Insurance, Life Insurance ,Terms, Sum Assured, Motor Vehicle Insurance	13
4.	<b>Allied Financial Services</b> Venture Capital – Growth of Venture Capital in India – Financing Pattern under Venture Capital, Leasing – types of Leases – Evaluation of Leasing Option Vs. Borrowing, Credit Rating – Meaning & Functions, Insurance Services,– Factoring – Forfaiting - .Discounting.	10
5.	<b>Case Studies</b> Case studies on financial markets and services	3
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1.	To understand the role and function of the financial system in reference to the macro economy.
2.	To demonstrate an awareness of the current structure and regulation of the Indian financial services sector.
3.	To evaluate and create strategies to promote financial products and services.

## Learning Resources:

1.	M Y Khan, “Financial Services”, TMH, 7th edition.
2.	Ravi M. Kishore, “Financial Management”, Taxmann’s, 6th edition.
3.	Bhole. L.M. and Jitendra Mahakud “Financial Institutions & Markets – Structure, Growth & Innovations”, TMH 5th edition.
4.	Anthony Saunders & Marcia Millon Cornett, “Financial Markets & Institutions”, TMH, 5th edition.

## BUSINESS ANALYTICS MINOR

<b>Course Name:</b>	<b>Principles of Programming using Python</b>		
<b>Course Code:</b>	MBA-BA304	<b>Category:</b>	Business Analytics
<b>Semester:</b>	Third	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic concepts of computer
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

<b>Course Objectives:</b>	
1	Learn the fundamentals of writing Python scripts with control structures
2	Learn Python data structures concept with handling of files
3	Learn to build robust code by handling errors and exceptions properly
4	Understand the Object oriented concept of Python
4	Learn the data visualization elements using Python

<b>Course Contents:</b>		
<b>Module No.</b>	<b>Description of Topic</b>	<b>Contact Hrs.</b>
1	<b>Introduction:</b> History, Features, Setting up path, Working with Python, Basic Syntax Variable and Data Types, Operator	4
2	<b>Conditional and looping Statements:</b> If, If-else, Nested if-else, Looping, For, While, Nested loops <b>Control Statements:</b> Break, Continue, pass	5
3	<b>String Manipulation :</b> Accessing Strings, Basic Operations, String slices, Function and Methods	5
4	<b>Lists :</b> Introduction, Accessing list, Operations, Working with lists, Function and Methods <b>Tuple:</b> Introduction, Accessing tuples, Operations, Working, Functions and Methods <b>Dictionaries:</b> Introduction, Accessing values in dictionaries, Working with dictionaries, Properties	8

5	<b>Functions :</b> Defining a function, Calling a function, Types of functions, Function Arguments, Anonymous functions, Global and local variables, Recursion, Some recursive codes , Recursion vs Iteration	4
6	<b>Exception Handling :</b> Exception, Exception Handling, Except clause, Try , finally clause, User Defined Exceptions	4
7	<b>The Object-Oriented Approach:</b> Basic concepts of object oriented programming, Implementation of Properties of Object-oriented Programming, Inheritance	6
8	<b>File Handling :</b> Introduction to File Handling, Data Files, Opening and Closing Files, Reading and Writing Files	4
9	<b>Data Visualization using Python:</b> Concept of Data Visualization, Using Pyplot of Matplotlib library, Creating Line chart, Bar chart and Pie chart using pyplot interface, Customizing the Plot; Business Application of python and real life case Studies	8
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	Apply different structures of the Python language to solve problems
2	Apply different Python function to solve problems
3	Solve different real life problems using object oriented concepts
4	Apply data visualization techniques to draw some insights from the data

## Learning Resources:

1	"Core Python Programming" by R.Nageswar Rao
2	"Python: the complete reference" by Martin C. Brown
3	"Let us Python" by Yashvant Kanetkar

<b>Course Name:</b>	<b>Database Management System</b>		
<b>Course Code:</b>	MBA-BA 305	<b>Category:</b>	Business Analytics
<b>Semester:</b>	Third	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic Concepts of Computer, Set Theory of Mathematics
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05



## Course Objectives:

1	To understand the different issues involved in the design and implementation of a database system.
2	To study the physical and logical database designs, database modeling, relational, hierarchical, and network models
3	To understand and use data manipulation language to query, update and manage a database.
4	To develop an understanding of essential DBMS concepts such as: database security, integrity and concurrency.

## Course Contents:

Module No.	Description of Topic	Contact Hrs.
01	<b>Introduction</b> Introduction and applications of DBMS, Purpose of data base, Data, Independence, Database System architecture- levels, Mappings, Database, users and DBA.	04
02	<b>Entity Relationship Model</b> Basic Concepts, Constraints, Keys, Design Issues, Entity Relationship Diagram, Weak Entity Sets, Extended E-R Features and Design of an E-R Database Schema Reduction of an E-R Schema to Tables.	05
03	<b>Relational Model</b> Structure of Relational Databases, The Relational Algebra, Extended Relational Algebra Operations, Modifications of the Database Views, The Tuple Relational Calculus, The Domain Relational Calculus.	04
04	<b>SQL</b> Basics of SQL, DDL, DML, DCL, structure – creation, alteration, defining constraints – Primary key, foreign key, unique, not null, check, IN operator, Functions - aggregate functions, Built-in functions – numeric, date, string functions, set operations, sub-queries, correlated sub-queries, Use of group by, having, order by, join and its types, , Any, All, view and its types. transaction control commands – Commit, Rollback, Savepoint.	08
05	<b>Relational Database Design</b> First Normal Form, Pitfall of Relational-Database Condition, Functional Dependencies, Decomposition, Desirable Properties of Decomposition, Boyce-Codd Normal Form, Third Normal Form.	08
06	<b>PL/SQL Concepts</b> Introduction to Cursors, Stored Procedures, Stored Functions, Database Triggers, Error Handling, Package	04
07	<b>Overview of Storage and Indexing</b> Data on External Storage – File Organization and Indexing – Cluster Indexes, Primary and Secondary Indexes – Index data Structures – Hash Based Indexing – Tree base Indexing	02



08	<b>Transaction Management</b> Transaction concepts, properties of transactions, serializability of transactions, testing for serializability, System recovery, Two- Phase Commit protocol, Recovery and Atomicity, Log-based recovery, concurrent executions of transactions and related problems, Locking mechanism, deadlock, two-phase locking protocol.	06
09	<b>Database System Architecture</b> Centralized and Client-Server Architectures, Server System Architectures, Parallel Systems, Distributed Systems	02
10	<b>A case-study for application of Database Knowledge</b> Develop a database for a real world system such as a banking system or an Academic Institution or A production unit of a factory etc.	05
<b>Total</b>		<b>48 L</b>

## Course Outcomes:

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

1	Understand database concepts (Flat-file vs. RDBMS), data-storage and query language
2	To design and build a simple database system and demonstrate competence with the fundamental tasks involved with modeling, designing, and implementing a DBMS
3	Understand Functional Dependency and Functional Decomposition.
4	Apply various Normalization techniques
5	Perform PL/SQL programming using concept of Cursor Management, Error Handling, Package and Triggers
6	Apply the knowledge of advanced SQL queries related to Transaction Processing & Locking using concept of Concurrency control in different Database Architectures

## Learning Resources:

1	A Silberschatz, H Korth, S Sudarshan, "Database System and Concepts"
2	R. Elmasri and S.B. Navathe, "Fundamentals of Database Systems"
3	C. J. Date, "An Introduction to Database Systems"
4	Raghu Ramakrishnan, Johannes Gehrke, "Database Management Systems"
5	Rob, Coronel, "Database Systems"

## MARKETING MINOR

<b>Course Name:</b>	<b>Advertising and Sales Management</b>		
<b>Course Code:</b>	MBA-MM303	<b>Category:</b>	Sales Management
<b>Semester:</b>	3	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	General Management knowledge.
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

<b>Course Objectives:</b>	
1	Demonstrate an awareness and understanding of the history of advertising.
2	Demonstrate an understanding of how an advertising agency operates.
3	Demonstrate an understanding of companies; advertising strategies and budgets.
4	To find out the social, economic and legal implications of advertisement

<b>Course Contents:</b>		
<b>Module No.</b>	<b>Description of Topic</b>	<b>Contact Hrs.</b>
1	<b>Advertisement: Introduction to Advertising:</b> History of advertising, Definition, features and role of advertising, Relationship of advertising with other promotional mixes and marketing mix elements, Various forms of Advertising: (national, retail, cooperative, trade, industrial, financial, corporate, public services, political). Social, Economic and Legal Implications of Advertisements – setting advertisement objectives – advertisement Campaign	7L
2	<b>Advertising Industry:</b> Advertisers, Advertising agencies and support organizations, Types of agencies, Structure, role and functions of ad agencies, Agency compensation and evaluation. Advertising Planning and Budgeting: Planning process, steps, situation analysis, objective setting, budgeting, developing promotional strategies, implementation and control, Budgeting approaches – different methods, allocation of budget. Media plan – type and choice criteria – reach and frequency of advertisements – cost of advertisements related to sales – media strategy and scheduling.	7L
3	<b>Designing an Advertisement:</b> Different dimensions, Importance of creativity to advertising, Creative process, developing a creative brief, Message Strategies: Message structure, Message appeals- rational, emotional, Message source- credibility, attractiveness, power. Internet Advertising- Meaning, types, components, Advantages, Limitations.	8L
4	Testing for advertising effectiveness ; Ethical and social issues in advertising ; Case Studies	4L
5	<b>Introduction to sales management:</b> The selling process, Managing Sales Information, Sales Organization, Managing of sales territory, Management of Sales Quota	6L

6	<b>Recruitment and selection of sales force:</b> training of sales force, sales force compensation. Evaluation and controlling of sales force. Major tools of sales promotion- samples point of purchase, displays & demonstrations, exhibitions & fashion shows, sales contests & games of chance and skill, lotteries gifts offers, premium and free goods, price packs, rebates patronage rewards. Conventions, conference & trade shows, specialties and novelties.	7L
7	<b>Developing sales promotion programme, pre-testing implementing, evaluation of results and making necessary modifications ;</b> Careers in Advertising & Sales Promotions Distribution Channel Management, Evolution of Marketing Channels, Retailing, wholesaling, Measuring Wholesale Performance, Franchising. Channel Information System, Logistics and SCM, IT and Logistics & SCM, Performance Measures.	9L
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	To understand the nature, role, and importance of brand management and advertising in marketing strategy
2	To understand effective design and implementation of advertising strategies.
3	To present a general understanding of content, structure, and appeal of advertisements.
4	To understand the concept of sales management.
5	to examine the elements of an effective sales force as a key component of the organization's total marketing effort..

## Learning Resources:

1	Contemporary Advertising: Arens W.F.; TMH
2	Advertising and Promotion: Belch G.E. and Belch M.A; TMH
3	Understanding Digital Marketing: Damian Ryan, Pearson
4	Advertising and Sales promotion : SH Hkazmi and Satish K. Banra,
5	Sales & Distribution Management (Latest Edition), Panda Tapan K., Sahadev Sunil, Oxford University Press.
6	Sales & Distribution Management – Text & Cases (2nd Edition), Krishna K. Havaladar, Vasant M. Cavale, Tata McGraw-Hill.
7	Sales & Distribution Management, Dr. S. L. Gupta, Excel, Latest Edition
8.	Advertising Management-Aaker, Myers, Batra
9	Advertising and Sales Promotion by S.K. Sarangi, Asian Books Pvt. Ltd.
10	Scientific Advertising by Claude Hopkins, by Ingram Short Title

<b>Course Name:</b>	<b>Product and Brand Management</b>		
<b>Course Code:</b>	MBA- MM305	<b>Category:</b>	Marketing Management
<b>Semester:</b>	3	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	General Marketing knowledge.
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

<b>Course Objectives:</b>	
1	Increase the understanding of the important issues in planning and evaluating product and brand strategies.
2	Provide “real world” experience and understanding of product and branding strategies and understand product and branding concepts from the consumer’s point-of-view.
3	Understand the work with the appropriate theories, models and other tools to ensure better branding decisions, and to make these concepts relevant for any type of organization.

<b>Course Contents:</b>		
<b>Module No.</b>	<b>Description of Topic</b>	<b>Contact Hrs.</b>
1	<b>Product Concepts: Introduction to Product:</b> Competition & Product Strategy, product in theory & in practice Product Mix concepts, Product Classification. Product Planning: Marketing Plan, Portfolio Analysis, Market Potential and forecasting	6L
2	<b>Product Management:</b> New product strategy, commercialization, managing Growth, Managing the mature Product Market Strategies. New Product Development, Product Life Cycle Stages and corresponding Strategies, Product Evaluation, Product Modification, Line Extension & Brand Extension.	8L
3	<b>Managing Brand: Creating brands in a competitive market:</b> Concept & function of Brand Management, Brand creation, Brand Name, Brand attributes, awareness, loyalty, Personality association, brand extension, co-branding, branding commodities	4L
4	<b>Strategic Brand Management Process:</b> Developing brand strategy Positioning concept, positioning statement, positioning process and steps; Brand Identity, Roles of brand, building Brand image, Brand dimensions	6L
5	<b>Planning &amp; Implementing Brand Marketing Programs:</b> Criteria for Choosing Brand Elements, Options & tactics for Brand Elements, Use of IMC for Brand Building, Leveraging Secondary Brand Associations to Brand building	6L
6	<b>Brand Equity:</b> Concept of brand equity, Brand equity vs brand value, brand equity benefits, brand review, brand value, creating brand equity and brand value. Products Developing a Brand Equity Management System. Measuring Sources of Brand Equity and Brand Equity measurement approaches	5L

7	<b>Brand Personality:</b> Concept, advantages, importance of brand personality, brand personality and user imaging. Brand ambassadors, Brand promise; Launching Brand Extensions	3L
8	<b>Brand Communication:</b> Understanding branding objective, brand communication strategy, mapping brand strategy with IMC, Media strategy.	3L
9	<b>Global Brands:</b> Concept of global brand, benefits, advantages of global branding, building on successful global branding global brand strategy. Managing brands overtime and Geographic boundaries	3L
10	<b>Case studies</b>	4L
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	Understand the product policy, product mix, product line, product modification and deletion.
2	Know the innovation, theories, models, process of new product development.
3	Examine the different growth strategies of new product and product portfolio analysis.
4	Familiarize the different concepts of product map joint space map and joint mapping.

## Learning Resources:

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

## HUMAN RESOURCE MINOR

<b>Course Name:</b>	<b>Employment Relations &amp; Labour Laws</b>		
Course Code:	MBA-HR302	Category:	Elective-HRM
Semester:	3rd	Credit:	4
L-T-P:	4-0-0	Pre-Requisites:	Basic Knowledge of HRM
Full Marks:	100		
Examination Scheme:	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

<b>Course Objectives:</b>	
1	Make the learner aware about the concept of industrial relations
2	To make the learner understand the concept of industrial disputes
3	To make the learner aware about the various legislations in working environment

<b>Course Contents:</b>		
<b>Module No.</b>	<b>Description of Topic</b>	<b>Contact Hrs.</b>
1	<b>Introduction:</b> Background of Employee Relations, Concept, Definition, Scope, Objectives, Factors, Participants & Importance of ER, Approaches to Employee Relations – The Dunlop's Approach, The Social Action Approach, The Human Relations Approach and The Gandhian Approach, Labour Policies, Role of ILO and its Influence on Legislation in India.	8
2	<b>The mechanism for Harmonious ER:</b> Collective Bargaining - Definition, Meaning, Nature, Essential Conditions, Functions and Importance, Process and its Implementation, Workers Participation in Management & Problem Solving Attitude, Grievance, Meaning and Forms, Sources, Approaches, Procedures, Model Grievance Procedure and Grievance Handling Committees.	10
3	<b>Legislations Governing Employee Relations:</b> The Industrial Disputes Act 1947 – Definition of Industry, Workmen and Industrial Dispute, Authorities Under the Act, Procedure, Powers and Duties of Authorities, Strikes and Lockouts, Layoff, Retrenchment and Closure, The Contract Labour (Regulation and Abolition) Act 1970 – Advisory Boards, Registration of Establishment, Licensing of Contractors, Welfare and Health of Contract Labour, Registers and Other Records to be Maintained.	10



4	<b>Legislation Governing Unions and Wages:</b> The Trade Union Act 1926- Formation and Registration of Trade Unions, Principle Privileges of a Registered Trade Union, Rights of Recognised Trade Unions, Types and Structure of Trade Unions, Impact of Globalisation on Trade Union Movement, Maharashtra Recognition of Trade Union and Prevention of Unfair Labour Practices Act 1971 – Unfair Labour Practices on the Part of Employers and Employees, Authorities and Punishments Under the Act, Minimum Wages Act 1948 – Definition of Wages, Fixation and Revision of Minimum Wages, Advisory Boards and Committees, Fixing Hours for a Normal Working Day, Wages for Worker Who Works for less than Normal Working Day, Maintenance of Registers and Records	10
5	<b>Legislation Governing Working Environment:</b> The Factories Act 1948 – Definitions of Factory, Manufacturing Process, Worker, Occupier; Provisions Under Health, Safety and Welfare, Working Hours, Annual Leave with Wages, Prohibition of Employment of Young Children, Maharashtra Shops & Establishment (Regulation of Employment and Conditions of Service) Act, 2017 – Scope, Registration of Establishments, Opening and Closing Hours, Hours of Work, Interval for Rest, Spread Over, Wages for Overtime and Weekly off, Leave with Pay and Payment of Wages and Welfare Provisions, Offences and Penalties, Maternity Benefit Act, 1961 – Entire Act and Latest Amendment, The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 – Definitions of Sexual Harassment, Employee, Workplace, Complaints Committee, Complaint Mechanism, Aggrieved Woman, Chairperson; Constitution of Internal Complaints Committee, Complaint, Inquiry into Complaint, Duties of Employer.	10
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	Understand the concept of industrial relations
2	Apply the relevant laws related to working environment
3	Aware of fair and unfair labour practices
4	Understand the grievance handling mechanism in an organizational setting

## Learning Resources:

1	B. Pai, Labour Law in India (2001)
2	L. Malik, K.D. Srivastava's Law Relating to Trade Unions and Unfair Labour Practices in India (4 <sup>th</sup> ed., 2002, with Supplement 2003)
3	D. Srivastava, Industrial Employment (Standing Orders) Act, 1946 (4 <sup>th</sup> ed., 1998 with Supplement 2003)
4	Industrial Relations - Ramaswamy
5	Industrial Relations - T. V. Rao



<b>Course Name:</b>	<b>Performance management and competency mapping</b>		
<b>Course Code:</b>	MBA-HR304	<b>Category:</b>	Elective-HRM
<b>Semester:</b>	3rd	<b>Credit:</b>	4
<b>L-T-P:</b>	4-0-0	<b>Pre-Requisites:</b>	Basic Knowledge of HRM
<b>Full Marks:</b>	100		
<b>Examination Scheme:</b>	Semester Examination:70	Continuous Assessment:25	Attendance:05

## Course Objectives:

	This course will help students to understand the significance of Performance Management System and give an indepth understanding into the fundamentals of Competency Management and Development of Competency maps It will also develop an understanding of various Competency based HRM Processes to manage the performance of employees
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## Course Contents:

Module No.	Description of Topic	Contact Hrs.
1	<b>Introduction to Performance Management:</b> Objectives of P A, Issues and Problems in P A, Job Description and PA, Job Analysis in P A Systems, Historical Review of PA , Research Findings in P A in India and abroad, Conceptual Approach to Performance Management, Determinants of Job Performance, Goal setting, KRA, KPIs, Components of Effective Performance Management, Performance planning- Theories of goal setting, Goal setting theory, Expectancy theory , setting of performance criteria, process of setting performance criteria, Process of Performance Planning, Performance Management Cycle, Designing of Performance Management Systems. Case Discussion	10
2	<b>Process of Performance Appraisal and Establishing PMS:</b> Components of Performance Management System, Performance planning, Ongoing support and coaching, Performance measurement and evaluation, Performance management and appraisal , Methods of Performance Appraisal, Appraisal Communication, Performance Review Discussion , RSDQ Model, Counseling, Identifying potential for development, Implications of Management Styles on P A, Implementation and Issues in Performance Management, Strategies and Challenges; Characteristics of effective performance metrics, Role of HR Professionals in Performance Management, Barriers to performance planning- Organizational & Individual. Case Discussion	10
3	<b>Introduction to Competency: Introduction:</b> Concept and definition of Role and Competency, Characteristics of competency, Core Competency, Competency versus competence, Performance versus Competency, Skills versus Competency, Behavior indicators, Types of competencies - Generic/Specific, Threshold/Performance, and differentiating and technical, managerial and human.. Case Discussion	8

4	<b>Competency Management Framework:</b> Competency framework - Development of Competency Framework, Lancaster Model of Managerial Competencies, Understanding job positions, Data collection instruments for job descriptions, Validation of the competency model after Data Gathering, Stages in design and implementation of competency model, Competency Dictionary, BEI for Competency Mapping. Experiential Exercises I - Use of FIRO B to measure competency for Interpersonal Skills	8
5	<b>Development of Competency Maps and Integration of Competency based HRM:</b> Steps in development of competencies map - Studying Job, Processes, and Environment, Studying attributes of Star Performers, Strategy Structure Congruence, Ensure non repetitive tasks in two different roles, Identifying Knowledge, Skills and Traits for each Job for creating Competitive Advantage, Creating Competency Map using Competency Matrix. Competency based HRM - Using Competency maps for Competency profiling - Job competency profiling, Role competency profiling, Functional competency profiling, Competency based Selection, Competency based Interviews, Competency based Performance Management System, Competency based Training and Development, Competency driven Career Planning, Competency linked Remuneration, Development of Assessment Centres.. . Experiential Exercises II - Competency Assessment – Assessment Centre Tools ( In Basket Exercises, Role Plays, Competency Based Interviews (CBI) using Situation, Task Action, Result) STAR method Use of technology and e-PMS, Current Performance Management and Competency mapping practices in Indian organizations, Relevance of Competency Mapping in different Sectors, Role of Artificial Intelligence in screening of Talent, Competencies needed to work in Gig economy, Flexible and Virtual workforce, Role of Leadership in Competency Assessment for effective Talent Management..Case Discussion	12
<b>Total</b>		<b>48L</b>

## Course Outcomes:

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

1	understand the role of Performance and Competency Management in enhancing Professional Excellence
2	apply the Competency based HRM systems in the organizations.
3	Create, analyze and evaluate the role of Psychometric Personal Profiling for Professional Excellence
4	Create the Competency Maps for different Organization Profiles.

## Learning Resources:

1	Armstrong, Michael and Berron, Angela (2008), Performance Management and Development, Jaico Publications
2	Murphy and Cleaveland: Performance Appraisal, Sage Publication
3	Performance Management: Strategies, Interventions and Drivers, Prentice Hall of India
4	Herman Aguinis: Performance Management, Pearson Education



# MCKV INSTITUTE OF ENGINEERING

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5	Rao T V (2008), Performance Management and Appraisal Systems-HR Tools for Global Competitiveness, Response Books
6	Cardy Robert L. (2008), Performance Management Concepts, Skills and Exercises, Prentice Hall India Sahu R K (2007), Performance Management System, Excel Books
7	Sanghi, Seema. The Handbook of Competency Mapping: Understanding, Designing and Implementing Competency Models in Organizations, 2nd e, Sage Publications Pvt. Ltd 2007
8	Competency Mapping: A pre- requisite for HR Excellence - by Dr. Lovy Sarikal

## **MBA 381: SUMMER INTERNSHIP PROJECT: 6 credits**

At the end of the second semester, the students will undergo Summer Internship Training for about eight weeks duration in a Professional Organization.

Students need to mandatorily submit a detailed report related to their internships

Students also need to show a power point presentation related to their internship project in front of a panel comprising of 3-4 faculty members and experts. This entire evaluation would be a part of third semester comprising of 6 credit points.