

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING
SYLLABUS 2024-25**

**II YEAR
SEMESTER-III**

Course Code	Course Title	Nature	Credits	HPW (Th+Tu+P)	Max Marks (CCE+ESE)
MTM301	Operations Management	Core	4	4Th + 1 Tu	40+60
MTM302	Global Business Strategies	Core	4	4Th + 1 Tu	40+60
MTM303	Business Analytics	Core	4	4Th + 1 Tu	40+60
DSE304	Finance/ /Marketing / HR	Elective	5	4Th + 1 Tu	40+60
DSE305	Tech Elective I/ Tech Elective II	Elective	5	3Th + 2P+1 Tu	40+40+20P
LAB301	RProgramming Lab	Lab	2	4 P	50
RD301	Research Design		1		25
PS301	Progress Seminar		1		25
			26		600
Total Credits at the end of III Semester			78		1850

DSE.304

Finance: Investment Management

Marketing: Advertisement and Retail Management

HR: Compensation Management

DSE.305

Tech Elective I - Database Management Systems

Tech Elective II - Data Visualization

- **HPW – Hours Per Week**
- **CCE – Continuous Comprehensive Evaluation**
- **ESE – End Semester Exam**
- **Th- Theory**
- **Tu – Tutorial**
- **P - Practical**

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER-III

PAPER CODE – MTM 301

Course: OPERATIONS MANAGEMENT

Course Objectives:

1. To provide an extensive introduction to the field of operations management.
2. To explain the concepts, strategies, tools and techniques for managing the transformation process that can lead to building of adequate knowledge regarding the basic manufacturing facilities
3. How service activities have attained significance and need managerial skills to address the problem and build competitive advantage for the firm. Further
4. To introduce various optimization techniques with managerial perspective.
5. To understand maintenance management operations

Course Outcomes:

1. Understanding of the evolution of operations management practices and world class manufacturing processes
2. Define the importance /Planning organizing and controlling aspects of operations management,
3. Enhances the understanding of product development and design process, to maintain the economies in maintenance engineering.
4. Ability to plan and control the production and operations, and overcome bottlenecks
5. Provides insight to Quality management tools and practices

UNIT-I Introduction to Production and Operations Management

Introduction, Objectives, Scope and Differences among Production and Operations Management. Historical evolution of Production and Operations Management.

Characteristics of Modern Operation functions. Recent trends in Production and Operations Management. Operations Management interaction with other functional areas of management. The transformation Process: Manufacturing, Service and Hybrid Agile Manufacturing.

UNIT-II Operations Planning

PPC Introduction, Objectives, Basic types of Production Control, Capacity planning, Capacity Requirement,

Resources aggregate planning, MPS, MRP-I, MRP-II, Economic Batch quantity, Lean operations, JIT, Line balancing, ERP.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

UNIT-III Designing and Managing Operational systems

Introduction to product design, importance, objective, factors influencing, characteristics of good product design. Process design and selection, process planning, process strategy, product life cycle versus process life cycle.

Work Study, Method Study, Time study, Motion Study and work measurement. Facility location, Facility layout, types of layouts, Job Sequencing, Johnson's Algorithm, n jobs two machines, n jobs three machines, n jobs m machines, (Problems) Scheduling,

UNIT-IV Productivity, Quality and Maintenance Management

Productivity, importance, measurement of productivity, tools to increase productivity, factors affecting industrial productivity, TQM, essentials, principles, scope and ISO standards basics. Statistical Quality Control (SQC), Control charts for variables and attributes (Problems).

Break Down Maintenance, Preventive Maintenance, Replacement of machines, Replacement Models. when money's worth is not considered in capital cost of the Asset, when money's worth is considered in capital cost of the Asset, Individual and Group replacement (problems)

UNIT-V Inventory Control and Stores Management

Role and Importance of inventory, Inventory planning and control, Inventory decisions - Economic Order Quantity (EOQ), Selective Inventory Control, Safety Stock and Reorder Level and Inventory models-Inventory analysis and control systems: ABC, (Problems) VED, FNSD analysis, Just In Time (JIT)

Stores Management: Functions of stores and Materials control. Classification, codification, simplification and standardization of materials, Bin card, Double-Bin and stores Ledger. Evolution of Computer Based Stores Management and emerging trends in stores management.

Suggested Books:

1. Nigel Slack, Stuart Chambers and Robert Johnston - Operations management, Prentice Hall. Sixth edition
2. Panner Selvem - Production and Operations Management, Prentice Hall of India
3. Upendra Kachru - Operations Management - Excel Publications.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

4. Martin K. Starr: Production & Operations Management, Wiley India, New Delhi.
5. Buffa, S. Elwood and Sarin, K. Rakesh - Modern Production/Operations Management, John Wiley & Sons.
6. Chunnawals - Production & Operations Management, Himalaya Publications.
7. Kanishka bedi-Production & Operations Management, Oxford University Press.
8. Adam EE & Ebert RJ - Production and Operations Management, Prentice hall of India.
9. Chary, S.N. - Production & Operations Management, New Delhi, Tata McGraw Hill
10. Manoj Kumar Sarkar - Production & Operations Management, Jaico Publisher.
11. P. Rama Murthy - Production and Operations Management, new age international.
12. Gaither N. and Frazier, G., Operations Management, ed. ix, Thomson.
13. Biswatjit Banerjee, Operations Management and Control,3e, S.Chand, ISBN:9788121925938
14. NVS Raju, Operations Management, BS publications

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING
SYLLABUS 2024-25**

SEMESTER-III

PAPER CODE – MTM 302

Course: GLOBAL BUSINESS STRATEGIES

Course Objectives:

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

Learning Outcomes:

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

Unit – I: Introduction to Global Business

Evolution of International business- Globalization of business, Internationalization process, International Business Approaches, International Trade Theories- Adam smith theory, David Ricardo, International Product Life Cycle theory, Rostov's growth theory- Regional Business and Global Business. Electronic Global Business.

Unit – II: Business & Regulation

Rationale for Government Intervention- Forms of Trade regulations at National Level- Tariff and Non- Tariff Barriers- Regional Economic Integrations- Levels of Economic Integration- Benefits and Costs of Integrations- Multinational Companies- Entry methods – Cost benefit Analysis- Impact on National Economies.

Unit – III: Global Business and Multilateral Agreements

Basic Principles of Multi-lateral Trade Negotiations- GATT and Its Evolution- Dunkel's Draft-WTO Structure- Functions- Success Stories- TRIPS, TRIMS, - Other Regional Trade Blocks – NAFTA, EU, ASEAN, SAFTA and UNCTAD

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

Unit – IV: Global Business Entry Strategies

Global Market Entry Strategies – Exporting, Licensing, Franchising, Contract Manufacturing, Turnkey Projects, Joint Ventures, Mergers, Acquisitions- Strategic alliances, Types of Alliances, Corporate Analysis, Intelligent Alliances – Electronic global business approaches – E- Business models- Risks and Rewards – Cost Benefit analysis of Entry Strategies.

Unit – V: Managing Global Business

Strategy and Global Business- Global Business Planning and Implementing Strategies- Designing Effective International Organizations- Cross Cultural Management- Culture and International Business- Intercultural Communications- Human Resource Management in global context- Human Resource Planning, Training and Development- Managing Expatriates- International Labour Relations.

Suggested Books:

1. Richard M Hodgets & Fred Luthans 2008, “International Management” T M H, New Delhi.
2. John D Daniel & Lee H. Radebaugh, International Business” Pearson Education.
3. Alan M. Rugman, Richard M. Hodgets, “International Business” Prentice Hall
4. P. Subbarao , “International Business” Himalaya Publishing House.
5. Chary S N, “Elements of International Business” John Wiley Publications.
6. Larraian Seigal, “International Business” Times Business random House, NewYork.
7. Manab Thakur, Gene E. Burton & B N Srivastava, “International Management” Concepts and Cases, T M H.
8. John B. Cullen, “Multinational Management” A Strategic Approach” Thomson Publication.
9. Dutta, “International Business”, Wiley Publications.
10. Zubeda Begum, B.Pramesh and B.S.Sudha, “International Business”, Himalaya Publications.
11. Jayakar Dalavai, Vidyadhar Reddy Aileni, International Business, BS Publications

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER-III

PAPER CODE – MTM 303

Course: BUSINESS ANALYTICS

Course Objectives:

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

Course Outcomes:

1. Describe data as a tool for business analysis
2. Apply data visualization techniques for businesses
3. Evaluate Micro metrics to identify data gaps
4. Design business models that help in better decision making
5. Develop, manage and manipulate data Using R program

Unit – I: Introduction to Business Analytics

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

Unit – II: Descriptive Analytics

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

Unit – III: Predictive Analytics

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

Unit – IV: Prescriptive Analytics

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

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

analytics, Web analytics.

Unit – V: Programming Using R

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

Suggested Books:

1. Camm, Cochran, Fry, Ohlmann, Anderson, Sweeney, Williams - Essentials of Business Analytics, Cengage Learning.
2. James Evans, Business Analytics, Pearson, Second Edition, 2017.
3. Albright Winston, Business Analytics - Data Analysis - Data Analysis and Decision Making, Cengage Learning, Reprint 2016.
4. Sahil Raj, Business Analytics, Cengage Learning.
5. Dinesh Jumar, Business Analytics – The Science of Data Driven Decision Making, Wiley
6. Kavitha Venkatachari, Fundamentals of Business Analytics Using Excel & R
7. Foster Provost & Tom Fawsett, Data Science for Business.
8. Jank Wolfgang, “Business Analytics for Managers”, Springer
9. Prema Alla, Introduction to Data Science Using R, BS Publications
10. Sharaff Aakanksha, Data Science and Its Applications, Taylor & Francis

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING
SYLLABUS 2024-25**

SEMESTER-III

PAPER CODE – DSE 304 -Finance

Course: INVESTMENT MANAGEMENT

Course Objectives:

1. To explain the various methods of investment analysis
2. To understand the features and valuation of debt and equity instruments
3. To explain the concept of portfolio and the various portfolio theories
4. To describe portfolio evaluation methods
5. To enumerate portfolio theory and management

Course Outcomes:

1. Differentiate various avenues of investment on the basis of risk and return
2. Demonstrate basic knowledge of analyzing stocks
3. Calculate valuation of equity, debt and portfolio instruments
4. Develop an understanding of mutual funds, their performance evaluation and regulation.
5. Assess and appraise portfolio management

Unit – I: Investments

Concept; Real vs. Financial assets; Investment decision process; Sources of investment information; Investment vs. Speculation; Factors to be considered in investment decision- Liquidity, Return, Risk, Maturity, Safety, Tax and Inflation. The concept and measurement of return-realized and expected return. Ex-ante and ex-post returns. The concept of risk. Sources and types of risk. Measurement of risk-Range, Standard Deviation and Co-Efficient of Variation. Risk-return trade-off. Risk premium and risk aversion. Approaches to investment analysis-Fundamental Analysis; Technical Analysis; Efficient Market Hypothesis.

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

Features and types of debt instruments, Bond indenture, factors affecting bond yield. Bond yield measurement-Current yield, holding period return, YTM, AYTM and YTC. Bond valuation: Capitalization of income method, Bond-price theorems, Valuation of compulsorily / optionally convertible bonds, Valuation of deep discount bonds. Bond duration, Macaulay's duration and modified Macaulay's duration. Bond convexity, Considerations in managing a bond portfolio, term structure of interest rates, risk structure of interest rates. Managing Bond Portfolio: Bond immunization, active and passive bond portfolio management strategies.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

Unit – III: Common Stocks - Analysis and Valuation

Basic Features of Common Stock, Approaches to valuation—Balance sheet model, dividend capitalization models; earnings capitalization models; Price-Earnings multiplier approach and capital asset pricing model, Free Cash flow model, relative valuation using comparable-P/E,P/BV, P/S; Security Market Indexes, their uses; computational procedure of Sensex and Nifty.

Unit – IV: Portfolio Theory

Concept of portfolio. Portfolio return and risk. Harry Markowitz's Portfolio theory, construction of minimum risk portfolio, the single-index model. Capital market theory: Introduction of risk-free asset, Capital Market Line, Separation theorem. Capital asset pricing model (CAPM): Security Market Line. Identifying over-priced and under-priced securities. Arbitrage pricing theory (APT): The Law of one price, two factor arbitrage pricing, Equilibrium risk-return relations. A synthesis of CAPM and APT.

Unit – V: Portfolio Evaluation

Performance measures-Sharpe's reward to variability index, Treynor's reward to volatility index, Jensen's differential index, Fama's decomposition of returns. Mutual funds: genesis, features, types and schemes. NAVs, costs, loads and return of mutual funds, Problems and prospects in India, Regulation of mutual funds and investor protection in India.

Suggested Books:

1. Alexander. G.J, Sharpe. W.F and Bailey. J.V, "Fundamentals of Investments", PHI, 3rd Ed.
2. Zvi Bodie, Alex Kane, Marcus.A.J, Pitabas Mohanty, "Investments", TMH, 8th Ed.
3. Prasanna Chandra, "Investment Analysis and Portfolio Management", TMH, 3rd Ed.
4. Charles.P.Jones, "Investments: Analysis and Management", John Wiley & Sons, Inc. 9th Ed.
5. Francis. J.C. & Taylor, R.W., "Theory and Problems of Investments". Schaum's Outline Series, McGraw Hill
6. Herbert. B. Mayo, "Investments: an Introduction", Thomson – South Western. 9th Ed.
7. Peter L. Bernstein and Aswath Damodaran, "Investment Management", Wiley Frontiers in Finance.
8. Stephen A. Ross, Randolph Westerfield, and Jeffrey Jaffe, "Corporate Finance", TMH.
9. S. Chand "Investment Management: Security Analysis & Portfolio Management".
10. S. Kevin, "Security Analysis and Portfolio Management", PHI.

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING
SYLLABUS 2024-25**

11. Punithavathy Pandian, "Security Analysis and Portfolio Management", Vikas Publishing House
12. Donald E. Fisher and Ronald J. Jordan: "Securities Analysis and Portfolio Management", Prentice Hall.
13. Peter L. Bernstein, Aswath Damodaran, "Investment Management", Wiley Publications, ISBN:9780471191757
14. V.K.Bhalla, "Fundamentals of Investment Management", S.Chand Publications

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING
SYLLABUS 2024-25**

SEMESTER-III

PAPER CODE – DSE 304 -Marketing

Course: ADVERTISING AND RETAIL MANAGEMENT

Course Objectives:

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

Course Outcomes:

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

Introduction to Advertising

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

Ad Media Strategy

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

Overview of Retailing

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

Key Concepts in Retail

Retailing in rural India, Geographic spread of Indian retail sector, Organized & unorganized,

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

Types of retail formats, Retailing in services sector, International retailing, Cultural challenges in International retail, Role of MNC's

Retail Trends

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

Suggested Readings:

1. Aaker, David A, Advertising Management 4th edition, PHI
2. Bajaj Tuli Srinivatsava , Retail Management, 3rd Edition, Oxford Publication
3. Belch, George, E. Blech, Michael A, Advertising and promotion, Tata McGrawHill,
4. Ogilvy David, Ogilvy "Advertising" , Longeman, London
5. Chunawalla, S.A., Advertising , Sales and Promotion Management, HimalayaPublishing House.
6. Mohan, Mahendra, "Advertising Management", Tata Mcgraw Hill
7. Levy & Weitz, "Retailing Management", Tata McGraw Hill
8. Bary Berman & Evans, "Retail Management- A Strategic Approach", Pearson education
9. Akileshwar Pathak, "Legal Aspects of Business", Tata McGraw Hill
10. Nicholas Alexander, "International Retailing", Blackwell Basin Publishers Ltd
11. Dr. Harjith Singh, "Retail Management: A Global Perspective", S. Chand Publications.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER-III

PAPER CODE – DSE 304 - HR

Course: COMPENSATION MANAGEMENT

Course Objectives:

1. To demonstrate various perspectives of compensation management
2. To provide thorough knowledge of planning and administering compensation indifferent sectors.
3. To understand the nature of executive and international compensation
4. To list various fringe benefits and Voluntary Retirement Schemes.
5. Determine the nature and management of Executive compensation

Course Outcomes:

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

UNIT I: Fundamentals of Compensation

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

UNIT II: Compensation Planning and Employee Contributions

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

UNIT III: Wage Administration

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

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

UNIT IV: Employee Benefits and Services

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

UNIT V: Executive and International Compensation

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

Suggested Readings:

1. Joseph J. Martocchio- Strategic Compensation- 3rd Edition
2. Dr. Pradeep Kumar Das, Dr. Madan Chettri, Roshni Tamang., Compensation Management, Lulu Publication, 2021, 1st Edition.
3. Tapomoy Deb, Compensation Management – Texts and Cases, Excel Books, 2009, 1st Edition.
4. S. K. Bhatia, “New Compensation Management in Changing Environment – Managerial Remuneration and Wage & Salary Administration, A Professional Manual”, Deep and Deep Publications Pvt. Ltd., 2009, 3rd Edition.
5. R.C. Sharma and Sulabh Sharma, “Compensation Management”, Sage Publications, 2019,
6. Milkovich, Newman, Gerhart, “Compensation”, Tata McGraw Hill, 2011, 10th Edition
7. Richard I. Henderson, Compensation Management in a Knowledge-Based World, Pearson Education, 2009, 10th Edition.
8. B D Singh, Compensation and Reward Management, 2008, Excel Books.
9. Dr. Vinay Ojha, “Compensation and Reward Management”, 2019, 7th Edition.
10. Luis R. Gomez-Mejia & Steve Werner, Global compensation - Foundations and perspectives Routledge, 2008.
11. Mousmi S. Bhattacharya, Nilanjan Sengupta, “Compensation Management”, Excel Books, 2009, 1st Edition.
12. Dipak Kumar Bhattacharya, “Compensation Management”, Oxford University Press, 2015

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER-III

PAPER CODE – DSE 305 – Tech Elective I Course: DATABASE MANAGEMENT SYSTEMS

Course Objectives:

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

Course Outcomes:

1. Apply the basic concepts of Database Systems and Applications
2. Design a commercial relational database system (Oracle, MySQL) by writing SQL using the system.
3. Appraise Database design and to familiarize issues of concurrency control and transaction management in DBMS
4. Develop an understanding Database recovery Authentication, Authorization and access control.
5. Assess and appraise SQL concepts and its applications

Unit-1: Database System Architecture and Data Models

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

Unit-2: Relational Query Languages and Relational Database Design

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

Unit-3: Query Processing and Optimization and Storage Strategies

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

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

Unit-4: Transaction Processing and Database Security

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

Unit-5: SQL and PL/SQL Concepts

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

Suggested Books:

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

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2023-24

SEMESTER-III

PAPER CODE – DSE 305 – Tech Elective I

Course: DATABASE MANAGEMENT SYSTEMS - Practical Syllabus

Note: Student is required to submit a document showing the database as per their questions

Experiment 1: Student should decide on a case study and formulate the problem statement.

Experiment 2: Conceptual Designing using ER Diagrams (Identifying entities, attributes, keys and relationships between entities, cardinalities, generalization, specialization etc.)

Experiment 3: Converting ER Model to Relational Model (Represent entities and relationships in Tabular form, Represent attributes as columns, identifying keys) tables created from ER Model.

Experiment 4: Normalization -To remove the redundancies and anomalies in the above relational tables, Normalize up to Third Normal Form

Experiment 5: Creation of Tables using SQL- Overview of using SQL tool, Data types in SQL, Creating Tables (along with Primary and Foreign keys), Altering Tables and Dropping Tables

Experiment 6: Practicing DML commands- Insert, Select, Update, Delete

Experiment 7: Practicing Queries using ANY, ALL, IN, EXISTS, NOT EXISTS, UNION, INTERSECT, CONSTRAINTS

Experiment 8: Practicing Sub queries (Nested, Correlated) and Joins (Inner, Outer and Equip).

Experiment 9: Practice Queries using COUNT, SUM, AVG, MAX, MIN, GROUP BY, HAVING, VIEWS Creation and Dropping.

Experiment 10: Practicing on Triggers - creation of trigger, Insertion using trigger, Deletion using trigger, Updating using trigger

Experiment 11: Procedures- Creation of Stored Procedures, Execution of Procedure, and Modification of Procedure.

Experiment 12: Cursors- Declaring Cursor, Opening Cursor, Fetching the data, closing the cursor

Experiment 13: Creating forms and working with different objects, Graphics and reports.

Experiment 14: To create a table, alter and drop table.

Experiment 15: To perform select, update, insert and delete operation in a table.

Experiment 16: To make use of different clauses viz where, group by, having, order by, union, intersection, set difference.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2023-24

Experiment 17: To study different constraints. [SQL FUNCTION]

Experiment 18: To use oracle function viz aggregate, numeric, conversion, string function.

Experiment 19: To understand use and working with joins.

Experiment 20: To understand use and working of sub-queries.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2023-24

SEMESTER-III

PAPER CODE – DSE 305 – Tech Elective II

Course: DATA VISUALIZATION

Course Objectives:

1. To enable students to understand the concepts related to data visualization.
2. To understand the tools and techniques of Data Visualization, dashboards.
3. To enable a practical understanding of Visualization with Power BI.
4. Understand the concepts of dashboards in data visualization
5. Summarize the aspects of Microsoft power BI

Course Outcomes:

1. Assess the importance of Data -Visualization for Decision- making.
2. Indentify practical experience of Data Visualization on Microsoft Power BI.
3. Analyze the tools and techniques of data visualization
4. Design data visualization dashboards
5. Formulate methods to organize and monitor data visualization dashboards

Unit – I: Introduction to Data and Information Visualization

Definition and why we visualize data? How we visualize data? A Brief History of Data Visualization, types of data – categorical, ordinal and quantitative data. Visual Analytics Concepts.

Unit – II: Data Visualization Tools and Techniques

Data Visualization tools – Multidimensional Data Visualization Tools (Column and Bar Graphs, Charts, Line Graphs, Scatter Plots, Pie graph) Hierarchical and Landscape Data Visualization Tools (Maps, Tree Graph).

Unit – III: Data Visualization -Dashboards Basics

Definition- Performance Dashboard, types of dashboards (Operational, Tactical and Strategic) – Dashboard design-Business Activity Monitoring through Dashboards, Common pitfalls of Dashboard design. Organizing Data for Dashboards

Unit – IV: Introduction to Power BI

Power Bi Concepts-Parts of Power BI Desktop – Major Building Blocks of Power BI-Data Sets, Shared Data Sets, Reports, Dashboards – Types of Visualizations- Area Charts, Bar and Column Charts, Donut Charts, Gauge Charts, KPIs, Line Charts, Maps, Matrix, Q&A Visual, Tree Maps, Waterfall Charts.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2023-24

Unit – V: Microsoft Power BI and Other features

Getting Data Source-Excel as a source, SQL as Source, Web as a source- Creating and Interacting with Dashboard, Sharing Dashboards -Power Query Editor for querying data and Report server for Reports.

Suggested Books:

1. Data Visualization with Excel Dashboards and Reports -Dick Kusleika 2021, Wiley.
2. Business Intelligence, A Managerial Perspective on Analytics- Ramesh Sharada, Dursun Delen, Efraim Turban, Pearson.
3. Effective Data Visualization: Right Chart for Right Data- Stephanie P.H. Evergreen 2019.
4. Visual Data Mining -Techniques and Tools for Data Visualization and Mining- Tom Soukup, Ian Davidson, Wiley Publishing.
5. Performance Dashboards-Measuring, Monitoring and Managing your Business- Wayne W Eckerson, Wiley & Sons, Inc.(Performance Dashboards)
6. Microsoft Power BI Quick Start Guide: Devin Knight, Brian Knight, Mitchell Pearson, Manuel Quintana, Packt Publishing, 2018.
7. Introducing Microsoft Power BI- Alberto Ferrari, Marco Russo-Microsoft Press, 2016, Microsoft Corporation.

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING
SYLLABUS 2023-24**

PAPER CODE – DSE 305 – Tech Elective II

Course: DATA VISUALIZATION

Practical Syllabus

1. Getting Started with Power BI-Understanding the parts of Desktop Power BI.
2. Getting Access to Data Sources from Power BI.
3. Exploring Data Sets.
4. Creating simple visualizations -Creating Map Visualizations, Using Combination Charts, Using Table, Modify Colors in Charts, Adding Shapes, Images and Text box.
5. Creation, Sharing of Dashboards
6. Creation, Styling and Sharing of Reports
7. Using Excel Data (integrating excel data with Power BI)

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING
SYLLABUS 2023-24**

R Programming

PAPER CODE – LAB 301

Course: R PROGRAMMING - LAB

Introduction to the R Language, Programming Statistical Graphics, Programming With R, Simulation, Computational Linear Algebra, Numerical Optimization

Data Manipulation Techniques Using R Programming

Data In R, Reading And Writing Data, R And Databases, Dates, Factors, Subscribing, Character Manipulation, Data Aggregation

Statistical Applications Using R Programming

Basics, The R Environment, Probability and Distributions, Descriptive Statistics And Graphics, One- And Two-Sample Tests, Regression And Correlation

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING
SYLLABUS 2023-24**

RD 301

RESEARCH DESIGN

A Research Design seminar presentation to be made by the student on the topic chosen for Project Work. A synopsis must be submitted to the college.

The Research Design Seminar will consist of

1. Title of the Project.
2. Statement of the problem
3. Introduction
4. Aims and objectives
5. Hypotheses (if any)
6. Research Methodology
 - a. Nature of the study
 - b. Scope of the study
 - c. Data Collection methods
 - d. Tools for analysis
 - e. Chapterization (Name of the chapters)

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING
SYLLABUS 2024-25**

PS 301

PROGRESS SEMINAR

Students must present their Progress of Research Seminar showing the extent of work done on the Project chosen. A write up on the Progress Work must be submitted to the college.

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING
SYLLABUS 2024-25**

**MBA- TM - II YEAR
SEMESTER-IV**

Course Code	Course Title	Nature	Credits	HPW (Th+Tu+P)	Max Marks (CCE+ESE)
MTM401	Business Policy and Strategy	Core	4	4Th + 1 Tu	40+60
MTM402	Emerging Trends in Technology	Core	4	4Th + 1 Tu	40+60
MTM403	Technology Risk Management	Core	4	4Th + 1 Tu	40+60
DSE404	Finance/Marketing/HR	Elective	5	4Th + 1 Tu	40+60
DSE405	Tech Elective III / Tech Elective IV	Elective Elective	5	3Th + 2P	40+ 40+20P
DS 406	Dissertation		1		25
FP 407	Final Presentation		2		50
VV 408	Viva Voce during Final Presentation		1		25
Credits for Semester IV			26		600
Total Credits at the end of IV Semester			104		2450

DSE 404

Finance: International Finance
Marketing: Buyer Behaviour
HR: Performance Management

DSE 405

Tech Elective III– Advanced MIS with E-commerce lab
Tech Elective IV– Project Management with MS Projects lab

- **HPW –Hours Per Week**
- **CCE–Continuous Comprehensive Evaluation**
- **ESE– End Semester Exam**
- **Th- Theory**

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

- **Tu – Tutorial**
- **P – Practical**

SEMESTER-IV PAPER CODE-MTM 401 Course: BUSINESS POLICY AND STRATEGY

Course Objectives:

1. To impart key strategic business skills to the learners
2. To make the student learn about business environment
3. To expose the student towards various practical approaches of strategy formulation
4. To provide Industry analysis to the learners
5. To build understanding of the nature of dynamics of strategy implementation process

Course Outcomes:

1. The student develops higher level skills in strategic business areas
2. The student outlook changes towards business environment
3. They are exposed to practical problems of strategy formulation
4. The student attains the knowledge about Industry and market
5. The student critically analyzes the internal and external environment of business

Unit-I: Introduction to Strategic Management

Business Definitions, Business Objectives, Types of Businesses, Strategic Planning, Planning Process, decision making, Strategy definition, Establishing Corporate direction, Vision, Mission And Objectives – Strategic Intent – Strategic Management & Process, A Model of Strategy and Elements used in strategic positioning – Strategic choice and Strategic action.

Unit-II: Environmental Appraisal

Environmental scanning, Introduction, Demographic, Social and Cultural environment, Technological environment, Economic Environment, Political environment, Natural Environment and Industry analysis, Portfolio Analysis, BCG, GE and Add Little Models For understanding Competitive position, S W O T Analysis, Porter's Competitive Advantage, Value chain Analysis – Core Competencies and Capability building Strategies.

Unit-III: Strategy Formulation

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

Business Strategies: Business Level Strategy, Strategy formulation, Situation Analysis, Growth Strategies, Offensive strategies, Defensive strategies, Generic Strategies, Industry Life Cycle Analysis, Emerging Industries, Maturing Industry, Fragmented Industry, Strategy For Leaders, Challengers, Followers and Niches – Managing Business Crisis.

Unit-IV: Alternative Strategies:

Strategy analysis and Choices, Strategy Alternatives, Corporate level international strategy, Creating Value through Intensive Growth strategies, Integration Strategies, Diversification Strategies, Mergers & Acquisitions – Strategic Alliances – Outsourcing Strategies, Types of Outsourcing, Benefits, Growth and Drivers of Outsourcing, Managing Strategic Change, Approaches to Organizational Structure, Matching Structure and Strategy with the use of 7s.

Unit –V: Strategy Implementation and Control

Strategy Implementation: Strategies Evaluation and Control, Social responsibilities of Business, Business Ethics, Corporate Governance, Good Corporate Citizenship, Understanding Environmental Change and Instilling Corporate Culture for Promoting S M A R T approach, Re-Designing Organizational Structures and Controls – Corporate Failures, Mechanism for Strategy control and Evaluation, Types of Strategic Controls – Social and Ethical responsibilities of Corporate Organizations.

Suggested Books:

1. Arthur A Thomson Jr, Sitricland “Strategic Management concepts and cases
“TATA Mc Graw Hill Company Ltd. Second reprint 2010, New Delhi.
2. Gerry Johnson, Kevan Scholes, Richard Whittington, “Exploring Corporate
Strategy” Pearson Education Ltd. United Kingdom Second Edition 2009.
3. P. Subbarao “Business Policy and Strategic Management” Himalaya Publishing
House, Revised Edition 2017.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

4. Upendra Kachru “ Strategic Management” 2008 Concepts and Cases”
2005,

EXCEL BOOKS New Delhi.

5. R.M. Srivastava “Management Policy and Strategic Management –
Concepts,

Skills and Practices “ 2014 revised edition, H P H, Hyderabad.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER-IV PAPERCODE–MTM402 Course: EMERGING TRENDS IN TECHNOLOGY

Course Objectives:

1. Understand the latest developments in technological advancements
2. To enable learners' to gain an understanding of working of new technologies
3. To help understand the role of developing technologies in enhancing management efficiency
4. Identify the concept of digital supply chains
5. Explore various options of green technologies

Course Outcomes:

1. State the importance of emerging trends in technology
2. Assess the role of Artificial Intelligence and its applications in daily life
3. Categorize hands on experience of Machine Learning
4. Prepare a detailed concept of machine learning
5. Analyze the fundamentals of Internet of Things

Unit-1: Artificial Intelligence

Introduction to AI, History and concepts, Philosophy and nature, Goals of AI, Drivers and enablers, Programming with AI, Applications, AI techniques and tools, intelligent systems, Types of intelligent systems

Unit-2: Machine Learning

Introduction–Types of machine learning –Machine learning process- preliminaries, testing machine learning algorithms, Turning data into probabilities and statistics for machine learning, probability theory – Probability distributions – Decision theory

Unit-3: Fundamentals of IoT

Evolution of Internet of Things – Enabling technologies – IoT Architectures: one M2M, IoT World Forum (IoTWF) and Alternative IoT models – Simplified IoT architecture and core IoT functional stack -- Fog, Edge and Cloud in IoT – Functional blocks of an IoT ecosystem – Sensors, Actuators, Smart objects and Connecting smart objects

Unit -4: Digital Supply Chains

Digital supply chain strategy, Role of IoT, AI, Block chain to build digital supply chain, Supply chain analytics optimization, Managing supply chain to support omni channel strategy, Smarter supply chains, Agile supply chains, Best practices & implementation issues

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

Unit -5: Green Technologies

Introduction, Use of technology & science, Human impact on environment, Range of scientific research spanning green technologies: Energy, Atmospheric science, Agriculture, Material science, Hydrology, Innovations in green technology.

REFERENCES:

1. Christopher Bishop, "Pattern Recognition and Machine Learning" Springer, 2007.
2. Stephen Marsland, "Machine Learning – An Algorithmic Perspective", Chapman and Hall, CRC Press, Second Edition, 2014.
3. Pandey S.N., "Future of Green Technology" Jananda Prakashan Publishing, 2018
4. Bengio, Yoshua. "Learning deep architectures for AI", Foundations and trends in Machine Learning, Edition 2.1 (2009)
5. R. Singh, "Green technologies and environment sustainability" Springer, 2017
6. Stuart Russell, "Peter Norvig, "Artificial Intelligence – A Modern Approach", Pearson Publication, 2nd Edition, 2002.
7. Jeff Heaton, "Artificial Intelligence for Humans-Fundamental Algorithms, Create Space, Independent Publishers 1st edition, 2013.
8. Digital Supply Chains and Human Factor, Springer Edition 2020
9. Clayton M. Christensen, "The Innovators Dilemma" Harvard Business Review Press, 2013

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER IV PAPER CODE - MTM 403 Course: TECHNOLOGY RISK MANAGEMENT

Course Objective:

1. To understand the changes in market risk dynamics and ensure utility of technology
2. To enable to take on a more strategic view of organization's technology architecture and business risk landscape
3. Lead technology transformation towards organizational success and in turn achieve organization goals
4. Evaluate risk management under various circumstances
5. State the concept of technology risk culture

Course outcomes:

1. Effectively manage technology risks
2. Enhance organizational performance and security
3. Ensure improved compliance and achieve organization benchmarks
4. Categorize Risk culture, appetite and tolerance
5. Characterize various Technology Risk Assessment

Unit I: Technology Management Introduction

Foundations of Technology Management, Technology Forecasting and Assessment, Technology Creativity and Innovation, Technology Transfer Management, Information Technology for Business, Strategic Management of Technology, Technological innovation

Unit II: Enterprise Technology Strategy

Introduction of Enterprise Technology Strategy, Digital Transformation, Data to Insights to Strategy, Enabling Technologies with Data and IOT, Value creation–A strategic approach to Innovation Management, Agile Approach and Methodology, Financial appraisal of new technology–Technology obsolescence and strategic investment

Unit III: Risk Management–A Brief Introduction

Enterprise Risk Management(ERM), Operational Risk Management, Risk management frameworks, ERM Framework, The Committee of Sponsoring Organizations (COSO)ERM Integrated Framework, The ISO 31000 ERM Framework, The Control

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

Objectives for Information and Related Technology(COBIT)ERM Framework, The National Institute of Standards and Technology(NIST)ERM Framework, Risks and Insurance Management Society(RIMS) Risk Maturity Model ERM Framework, Risk Management Governance

Unit IV: Risk culture, appetite and tolerance

Organizational behavior and risk culture–Introduction, Risk appetite and tolerance, Risk training and communication, Risk practitioner competencies, Risk assessment and findings, Risk Register & Risk reporting, Emerging trends and future developments

Unit V: Technology Risk Assessment

Factors/Reasons leading to technology risk assessment, Risk Management Competencies, Strategic Decision making, Emerging technology risks, Compliance and legal risks, Operational risks, Infrastructure risks, Data security and privacy risks.

Suggested Readings:

1. Betz. F. Strategic Technology Management, McGraw-Hill.
2. Tarek Khalli, Management of Technology, McGraw-Hill.
3. Schilling “Strategic Management of Technological Innovation”, McGraw-Hill, 2nd edition.
4. V.K., “Narayanan, Managing Technology and Innovation for Competitive Advantage” Pearson Education Asia
5. Burgelman, R.A., M.A. Madique, and S.C. Wheelwright, Irwin, “Strategic Management of Technology& Innovation”
6. Gaynor, Handbook of Technology Management, McGraw Hill
Souder, W.C, C.M. Crawford, Managing New Technology Development, McGraw Hill.
7. Twiss, B, Pitman Managing Technological Innovation,
8. Kathleen R Allen,”Bringing New technology To Market”, Prentice Hall India
9. Management Of New Technologies For Global Competitiveness—Christian N Madu, Jaico Publishing House

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER-IV

Discipline Specific Elective Paper Code –DSE404-F

Course: INTERNATIONAL FINANCE

Course Objectives:

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

Course Outcomes:

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

Unit-I: International Financial System

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

Global financial institutions: IMF, Bank for International settlements: International banking –Euro bank, types of banking offices, Correspondent bank, Representative office, foreign branch, subsidiary bank, offshore bank. International financial instruments- Euro CP, Euro bonds, foreign bonds, Global bonds, Euro equity, ADRs, GDRs.

Unit-II: Foreign Exchange Market

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

Unit-III: Exchange Rate Determination & Risk Management

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

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

Financial risk, risk management through hedging natural hedges, hedges with currency derivatives- forward market hedging, options market hedge, Money market hedge, hedging exposure through swaps, other financial and non-financial methods of hedging.

Unit-IV: Multinational Corporate Decisions in Global Markets

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

Unit-V: International Tax Environment

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

Suggested Readings:

1. Eun C.S., Resnick B.G., "International Financial Management", Tata McGraw Hill Education
2. Levi M., "International Finance", Routledge, Taylor & Francis Group.
3. Shailaja G, "International Finance", Orient Blackswan.
4. Hendrik Vandenberg, "International Finance and Open Economy Macro Economics" Cambridge.
5. Sharan V, "International Financial Management", 2009, PHI,
6. Madura J, "International Financial Management", Cengage Learning.
7. Apte P.G, "International Finance", McGraw Hill.
8. "Risk Management, Indian Institute of Banking & Finance, Macmillan, 2006
9. Madhu Vij, "International Financial Management", Excel Books.
10. Jain, Peyrard and Yadav "International Financial Management", Trinity Press.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER-IV Discipline Specific Elective Paper Code – DSE404-M Course: BUYER BEHAVIOUR

Course Objectives:

1. Understand the world of buyer behavior.
2. The discipline borrows from several social sciences including psychology, sociology, and anthropology to explain behavior in the marketplace.
3. Analyze the various perceptions, learning, memory, personality, and attitudes influence consumption behavior.
4. Identify various buyer behavior theories and concepts to marketing decisions.
5. Describe the role of culture and family groups in buyer behaviour

Course Outcomes:

1. Identify the major influences in buyer behavior
2. Develop an understanding between different consumer behavior influences and their relationships.
3. Design and evaluate the marketing strategies based on fundamentals of consumer buying behavior.
4. Demonstrate a comprehensive understanding of buyer behaviour process
5. Describe models of buyer behaviour

Unit - I: Understanding Buyer Behaviour

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

Unit - II: Components of Buyer Behaviour

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

Unit - III: Role of culture and groups

Impact of Culture on Buyer Behaviour, Social and cultural settings: Meaning of culture, Characteristics of culture, functions of culture. Types of cultures, Sub-culture and Cross

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

cultural marketing practices. Reference groups and Family Life Cycle: advantages and disadvantage of reference groups, types of reference groups. Role of Family life cycle in Buyer behavior.

Unit - IV: Attitude and Buyer decision process

Consumer decision making and buyer attitude: Information Search, evaluation of alternatives. Steps between evaluation of alternatives and purchase decision. Post-purchase behaviour. Attitude and consumer behaviour:-Meaning of attitude, nature and characteristics of attitude, types of attitude, learning of attitude, sources of influence on attitude formation

Unit - V: Models of Buyer behavior

Models of Buyer Behaviour: Modelling Behavior, Traditional Models, Contemporary Models, Generic Models of Buyer Behavior, Howard Sheth Model, Engel Blackwell model and Rao-Lilien model, Consumerism

Suggested Books:

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

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER-IV Discipline Specific Elective Paper Code –DSE404-HR Course: PERFORMANCE MANAGEMENT

Course Objectives

1. Understanding of various approaches to measure performance and facilitate studying different methods of performance appraisal.
2. Provide knowledge of the processes performance bench - marking and framework of competencies
3. Understanding of various performance metrics and models.
4. Identify areas of performance benchmarking
5. Evaluate performance metrics and performance models

Course Outcomes

1. Identify and develop Competent Executives
2. Transform Performance Appraisals and Performance Management
3. Enumerate and build pivotal performance metrics
4. Establish leading Human Capital
5. Predict performance metrics and models

Unit - I: Introduction

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

Unit - II: Performance Appraisal

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

Unit - III: Performance Bench Marking

Human information processing and performance loop, performance shaping factors-Yerkes-Dodson's Law-Corporate performance management-EFQM Excellence model-Diagnostic and Process bench marking. PM Audit, PM pathway analysis. The impact of Performance Management on Line managers and Employees.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

Unit - IV: Competency mapping and Pay Plans

Competency Mapping-Mercer's Human Capital Wheel-Human Asset worth estimator and Accession rate-CIPD Human Capital framework, Performance, Competence and Contribution related pay models. Cafeteria benefits plan, call back pay. The McBer Generic managerial competency model- Competency causal flow model-Competency gap-Competency Assessment-Balanced Score Card framework.

Unit - V: Performance Metrics and Models

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

Suggested Books:

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

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER-IV Technology Elective-III Paper Code-DSE405 SUBJECT: ADVANCED MIS

Course objectives:

1. Analyze real world case studies to apply theoretical knowledge in solving practical MIS challenges faced by organizations
2. Understand the role of MIS in fostering innovation and creating business opportunities in a rapidly changing technological landscape
3. Apply critical thinking and problem solving skills to address complex business challenges using MIS solutions
4. Sketch the concepts of MIS
5. Assess the role of ERP systems in business environment

Course outcomes:

1. Evaluate advanced concepts and theories in MIS, including business intelligence, data analytics, cloud computing, cyber security, and emerging technologies.
2. Integrate different information systems and technologies for seamless data flow and communication within the organization.
3. Explore the societal and organizational impact of information systems, including digital divide, social media, and ethical considerations in technology adoption.
4. Formulate concepts of ERP in database management
5. State and assess emerging tools in reporting systems

Unit I: Introduction to MIS

Introduction to MIS, Understanding MIS, History Definition and significance of MIS, Basic Concepts of Information Systems, Strategic Role of MIS in organizations, Organization structures, Business Process Systems, Evolution of information systems from inception days to contemporary digital era

Unit II: Information systems and networks

Information Systems and Data -Database Management, Types of information systems, Introduction to Networks, types and essential components, Programmed and Non- Programmed decisions, Importance of Decision Support Systems, Models and approaches to DSS

Unit III: Concepts in MIS

Latest trends in MIS and Technology impact on MIS, Data warehousing and data mining, Artificial Intelligence and role of predictive analytics, Executive Support Systems and Strategic Information Systems, Data analytics and visualization, process improvement methodologies

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

Unit IV: ERP systems

Enterprise Systems & E-Commerce, ERP revolution, SAP, Oracle, Sage ERP, NetSuite, Microsoft Dynamics 365

Introduction to Enterprise Resource Planning (ERP) systems, Data Analysis and Reporting in ERP, Real-world examples of successful ERP implementations

Unit V: Trends in MIS

Emerging technologies & Reporting tools in MIS world and miscellaneous topics, Recent tools and technologies in MIS reporting, World Business Intelligence (BI) and Data Visualization Tools Power BI, Tableau, QlikView / Qlik Sense, Looker, Micro Strategy, Advanced Data Analytics and Data Science Tools, Python and R Programming

Role of MIS in Risk Management, Legal Considerations in ERP Compliance with regulations, Understanding the importance of Contract Management

Suggested Readings:

1. A O'Brien Management Information Systems, McGraw Hill Education
2. Laudon and Laudon Management Information Systems, Pearson education
3. Sadagopan S, "Management Information Systems", PHI Learning
4. D P Goyal, "Management Information Systems: Managerial Perspectives", Vikas Publishing House
5. Gupta A K, "Management Information System", S. Chand Publishing
6. W.S Jawadekar, "Management Information System", Tata McGraw Hill Publication
7. D.P. Goyal, "Management Perspective", Macmillan Business Books.
8. Raj K. Wadwha, Jimmy Dawar, P. Bhaskara Rao, "MIS and Corporate Communications" Kanishka Publishers.
9. Kenneth C. Landon, Jane P. Landon, "Managing the digital firm", Pearson Education.
10. Joseph Valacich, Christopher Schneider, "Information Systems Today: Managing the Digital World" Prentice Hall Publication
11. Foster Provost, Tom Fawcett, "Data Science for Business" O'Reilly Publication
12. Bruce Schneie, "Data and Goliath: The Hidden Battles to Collect Your Data and Control Your World" W.W. Norton & Co
14. Efraim Turban, Linda Volonino, and Gregory R. Wood "Information Technology for Management: Advancing Sustainable, Profitable Business Growth", Wiley

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER-IV E-COMMERCE PRACTICAL LAB

Following E-Commerce exercises need to be executed using either VB, ASP, SQL or JAVA

- Creating E-Commerce Site
- Designing and maintaining WebPages.
- Advertising in the Website and Portals
- E-Commerce Interaction
- Comparison Shopping in B2C Exchanges
- Handling in B2B, Interaction Examples: Virtual Shopping Carts.
- E-Commerce Applications: Online Store, Online Banking, Credit Card Transaction Processing.

Suggested Readings:

1. W Clarke "E-Commerce through ASP" BPB Publications
2. Mathew Reynolds "Beginning E-Commerce with VB, ASP, SQL Server & MTS, Wrox Publishers
3. Allamaraju et al "Professional Java Server Programming J2EE"

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

SEMESTER-IV Technology Elective-IV Paper Code-DSE405 SUBJECT: PROJECT MANAGEMENT

Course Objectives:

1. To outline the need of project management.
2. To understand the importance of project planning and Management.
3. To examine the process of project approval based on human interventions with accountability.
4. To Identify the role of project teams in project management
5. Learn to develop a project plan
- 6.

Course Outcomes:

1. Asses the importance of project management and describe the project life cycle
2. Analyze organizing systems and procedures for planning and execution.
3. Appraise project direction, coordination, control & review process.
4. Formulate a project plan in detail
5. Evaluate project progress and reporting systems

UNIT I: Introduction to Project Management

Defining a Project – Evaluating the Project Life Cycle, Role of Project Stake Holders and the Project Manager, Importance of Project Management, Project Management in the present times: An illustrative Approach - Integration of Projects with Organizational Strategy and Portfolio Management, Process of Implementing actual Projects.

UNIT II: Project Management Parameters: Scope, Time, Quality, Cost, And Selection of projects

Defining project scope, Establishing project priorities, Work break down structure, Process breakdown structure, Responsibility matrices, Factors influencing the quality of estimates, Estimating guidelines for times, costs and resources, Macro and micro estimating, Methods for estimating, Level of detail, Developing budgets, Types of costs, Refining estimates and contingency fund, Selection of project

UNIT III: Project Teams

Five stage team development model, Situational factors affecting teams, Building high performance project teams, Managing virtual project teams, Project Management Maturity Model (PMMO)
Project Expediting: Gantt chart, Crashing of projects, Cost analysis for project crashing, Project procurement.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

UNIT IV: Developing a Project Plan

Creating the Project Network, Evolving from Work Package to Network, Constructing a Project Network, Project network Terminology, Basic Rules to Follow in Developing Project Networks, Activity-on-Arrow (AOA) Fundamentals, Network Computation Process, Understand PERT and CPM
Managing Risk: Risk Management Process, Probability Analysis, Risk Response Development, Mitigating Risk, Contingency Planning, Opportunity Management, Contingency Funding and Time Buffers, Budget Reserves, Management of Reserves, Risk Response Control, Change Control Management

UNIT V: Project Progress

Project progress & performance measurement and evaluation-Structure of a project monitoring information system, Project control process, Monitoring time performance, Need for an integrated information system, Progress monitoring indexes, Environment, Health and Safety(EHS) in Projects, Ethical issues in Project Management.

Project evaluation- Project Auditing – Phases of project Audit- Project closure reports Guidelines for closeout reports.

Suggested Readings:

1. Clifford Gray, Erik Larson and Gautam Desai, Project Management, The Managerial Process, Tata McGraw Hill
2. Clements, Gido, “Effective Project Management”, Thomson India Edition.
3. Samuel Mantel, Jack Meredith, Scott Shafer, Margret Sutton and M.R. Gopalan, Project Management, Wiley India
4. Prasanna Chandra, Projects, Planning, Analysis, Selection, Financing, Implementation and Review, Tata McGrawHill
5. Project management Institute, The Guide to the Project Management Body of Knowledge (PMBOK Guide), PMI
6. Harold Kerzner “Project Management Metrics, KPIs, and Dashboards - A Guide to Measuring and Monitoring Project Performance

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS
2024-25**

**SEMESTER-IV
MICROSOFT PROJECTS PRACTICAL LAB**

MS Projects lab covers:

- Overview of Project Management Principles
- Introduction to MS Projects interface
- Creating a new project plan
- Setting up project information and calendar
- Creating and organizing tasks
- Tasks dependencies and constraints
- Task duration and deadlines
- Milestones and summary tasks

Suggested Readings:

1. Cindy Lewis, Carl Chatfield “Microsoft project 2019 step by step” Microsoft Press
2. Paul E. Harris “Planning and control using Microsoft Projects “Universal Book Sellers
3. Srikant Shirodkar “ Learning Microsoft projects 2019” Packt publishing Mumbai

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS 2024-25

Semester-IV – DS406 DISSERTATION

A dissertation has to be prepared and submitted at the end of the IV semester. This carries one credit. A broad outline for the dissertation is as follows

1. Introduction
2. Review of Literature
3. Research Methodology
4. Data analysis and findings
5. Conclusions, Suggestions and Recommendations
6. Annexure(Bibliography / References /Questionnaire)

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS
2024-25**

**Semester-IV – FP407
FINAL PRESENTATION**

A final presentation of the research / project work carrying two credits (50 Marks) is compulsory. This will be at the end of semester IV

**MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING SYLLABUS
2024-25**

**Semester-IV – VV408
VIVA VOCE DURING FINAL PRESENTATION**

The viva voce during final presentation will carry one credit and cover various aspects of the research project and also topics covered in the program curriculum. It will be a comprehensive viva voce