PROGRAMME PROJECT REPORT (PPR)

For

Master of Business Administration (MBA)

ONLINE DEGREE PROGRAMME

DIRECTORATE OF ONLINE EDUCATION (DOE)
MANIPAL UNIVERSITY, JAIPUR-303 007
RAJASTHAN
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PROGRAMME PROJECT REPORT

Introduction

At every step in one’s life, one needs to transform, to compete, and improve. In today’s dynamic business environment, being acquainted with concepts is not enough. It is essential to acquire and constantly upgrade knowledge about various dimensions of business. The Manipal University, Jaipur Online MBA Programme imparts knowledge and skill sets to students to achieve this, and face real world challenges. It teaches application of innovative practices to current business situations. It incorporates analysis of contemporary issues besides providing a strong theoretical foundation. It provides a collaborative learning environment with dedicated faculty to ensure students achieve their full potential. The online MBA Programme teaches one to work smartly, take the lead in critical situations, and influence business decisions more effectively. It teaches one to not only work efficiently, but also shape the business environment and create opportunities for further growth.

The Online Master of Business Administration (MBA) Programme is a two-year Programme. With inclusion of various specialisations, the Programme aims at developing focused managers with a strong understanding of their area of specialisation, even as the core subjects equip the students with fundamental management theories and concepts along with less tangible, but equally important soft skills. The Programme is designed to instil confidence, improve knowledge, and act as a catalyst in the search for success and growth.

1. Programme’s Mission and Objectives

To offer a high-quality Masters’ degree in Management (MBA) through Online mode to the students and working professionals to help them develop Managerial and Leadership skills to enhance their career prospects. The students will be able to move up their career ladder and/or launch out on an entrepreneurial career.

The objectives of the programme include:

- Introduce students to the basic concepts and domains of management including Finance, HR and Marketing
- Equip students with analytical skills and decision making
- Hone Skills of students and enable them to practice quantitative method techniques
- Inculcate entrepreneurial skills Managerial concepts with Leadership skills
- Develop knowledge about emerging markets and technologies
2. Relevance of Programme with Manipal University, Jaipur Mission and Goals

In order to align with the mission and goals of Manipal University Jaipur, the Online MBA Programme is planned to enable students and working professionals gain knowledge in various domains of management, specialize in a domain of their choice, gain knowledge of not only managerial skills including analysis, data based decision making and entrepreneurship, but also introduce them to Leadership role in newer and emerging markets, products and technologies.

Vision

Global Leadership in Higher Education and Human Development

Mission

- Be the most preferred University for innovative and interdisciplinary learning
- Foster Academic research and professional excellence in all domains
- Transform young minds into competent professionals with good human values.

3. Nature of Prospective Target Group of Learners

It is by now well accepted that an MBA degree is an important tool for professionals to enhance their knowledge of business, expand their career options and move up their career ladder, acquired Leadership skills or embark on an entrepreneurial journey.

This Online programme has been designed for conventional learners, as well as working professionals and other individuals aspiring to acquire knowledge and associated academic credentials. Considering that all candidates interested in pursuing a degree may not be able to afford the same through a campus mode for reasons of paucity of time or financial constraints, online delivery is a feasible option to enable them to acquire knowledge and skills. Delivery through this mode also contributes towards Gross Enrolment Ratio (GER) of 50% by 2035, as envisaged by the Government of India.

The programme is so designed that the prospective students who may not be able to afford full time, residential MBA are provided with high value learning, anytime, anyplace, at one’s own pace.
4. Appropriateness of programme to be conducted in Online mode to acquire specific skills and competence

The courses in the programme are delivered through Self-Learning e-Module which is a modular unit of e-learning material which is inter-alia self-explanatory, self-contained, self-directed at the learner, and amenable to self-evaluation, and enables the learner to acquire the prescribed level of learning in a course of study and includes contents in the form of a combination of the following e-Learning content, and made available through four-quadrant approach namely,

(a) e-Tutorial - faculty led Audio - Video Lectures, (b) e-Content (combination of PDF/ epub) Text Materials, (c) Discussion forum for raising of doubts and clarifying the same on real time basis by the Course Coordinators/Course Mentors assigned to students (d) Self-Assessment Quiz, Test and Assignments to reinforce learning. Reference books are also mentioned in the syllabus. Latest Edition of Reference books may be referred to.

A robust Learning Management System that keeps track of delivery of e-Learning Programmes, learner’s engagement, assessment, results and reporting in one centralized location, is in place. All of the above can be done/delivered by online and other platforms without much loss of fidelity. Hence the MBA programme is suited for Online mode of learning.

5. Instructional Design

5.1. Curriculum design
Curriculum has been designed by experts in the area of Management and care has been taken to include contemporary topics, as well as topics that also inculcate environmental awareness in students. The curriculum and syllabus are approved by the Board of Studies, Centre for Internal Quality Assurance (CIQA) and University Academic Council which consists of experts from Academia and Industry.
5.2. Programme structure and detailed syllabus

5.2.1. Programme Structure

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DMBA101</td>
<td>Management Process and Organisational Behaviour</td>
<td>4</td>
</tr>
<tr>
<td>DMBA102</td>
<td>Business Communication</td>
<td>4</td>
</tr>
<tr>
<td>DMBA103</td>
<td>Statistics for Management</td>
<td>4</td>
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<tr>
<td>DMBA104</td>
<td>Financial and Management Accounting</td>
<td>4</td>
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<td>DMBA105</td>
<td>Managerial Economics</td>
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<td>DMBA106</td>
<td>Human Resource Management</td>
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2nd Semester

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<td>Production and Operations Management</td>
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<tr>
<td>DMBA202</td>
<td>Financial Management</td>
<td>4</td>
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<tr>
<td>DMBA203</td>
<td>Marketing Management</td>
<td>4</td>
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<tr>
<td>DMBA204</td>
<td>Management Information System</td>
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<tr>
<td>DMBA205</td>
<td>Operations Research</td>
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<td>DMBA206</td>
<td>Project management</td>
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3rd Semester

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<td>DMBA301</td>
<td>Research Methodology</td>
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<tr>
<td>DMBA302</td>
<td>Legal Aspects of Business</td>
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4 elective courses in chosen area (4 credits each) 16

4th Semester

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<td>DMBA401</td>
<td>Strategic Management &amp; Business Policy</td>
<td>4</td>
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<td>DMBA402</td>
<td>International Business Management</td>
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<tr>
<td>DMBA403</td>
<td>Business Leadership</td>
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4 elective courses in chosen area (4 credits each) 16

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>DMBA404</td>
<td>Project</td>
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Total Credits 102
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<td><strong>3rd semester (Finance)</strong></td>
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<tr>
<td>DFIN301</td>
<td>Security Analysis and Portfolio Management</td>
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<tr>
<td>DFIN302</td>
<td>Mergers and Acquisitions</td>
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<td>DFIN303</td>
<td>Taxation Management</td>
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<td>DFIN304</td>
<td>Internal Audit and Control</td>
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<tr>
<td><strong>4th semester (Finance)</strong></td>
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<td>DFIN401</td>
<td>International Financial Management</td>
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<td>DFIN402</td>
<td>Treasury Management</td>
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<tr>
<td>DFIN403</td>
<td>Merchant Banking and Financial Services</td>
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<tr>
<td>DFIN404</td>
<td>Insurance and Risk Management</td>
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<tr>
<td><strong>3rd semester (Marketing)</strong></td>
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<td>DMKT301</td>
<td>Sales Distribution and Supply Chain Management</td>
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<td>DMKT302</td>
<td>Consumer Behaviour</td>
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<td>DMKT303</td>
<td>Retail Marketing</td>
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<td>DMKT304</td>
<td>Marketing Research</td>
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<td><strong>4th semester (Marketing)</strong></td>
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<td>DMKT401</td>
<td>Services Marketing and Customer Relationship Management</td>
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<td>DMKT402</td>
<td>Advertising Management and Sales Promotion</td>
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<tr>
<td>DMKT403</td>
<td>e-Marketing</td>
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<td>DMKT404</td>
<td>International Marketing</td>
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<td><strong>3rd Semester (HRM)</strong></td>
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<td>DHRM301</td>
<td>Manpower Planning and Sourcing</td>
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<td>DHRM302</td>
<td>Management and Organizational Development</td>
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<td>DHRM303</td>
<td>Employee Relations Management</td>
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<td>DHRM304</td>
<td>HR Audit</td>
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<td><strong>4th Semester (HRM)</strong></td>
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<tr>
<td>DHRM401</td>
<td>Compensation and Benefits</td>
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<td>DHRM402</td>
<td>Performance Management and Appraisal</td>
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<tr>
<td>DHRM403</td>
<td>Talent Management and Employee Retention</td>
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<td>DHRM404</td>
<td>Change Management</td>
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<tr>
<td><strong>3rd Semester (Analytics and Data Science)</strong></td>
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<tr>
<td>DADS301</td>
<td>Programming in Data Science</td>
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<td>DADS302</td>
<td>Exploratory Data Analysis</td>
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<td>DADS303</td>
<td>Introduction to Machine Learning</td>
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<td>DADS304</td>
<td>Visualization</td>
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<tr>
<td><strong>4th Semester (Analytics and Data Science)</strong></td>
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<tr>
<td>DADS401</td>
<td>Advanced Machine Learning</td>
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<tr>
<td>DADS402</td>
<td>Unstructured Data Analysis</td>
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<tr>
<td>DADS403</td>
<td>Business Analytics</td>
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<td>DADS404</td>
<td>Data Scrapping</td>
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<tr>
<td>3rd Semester (Retail Management)</td>
<td>4th Semester (Retail Management)</td>
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<tr>
<td>DRMM301 Enterprise Resource Planning (ERP)</td>
<td>DRMM401 International Retailing</td>
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<tr>
<td>DRMM302 Retail Customer Relationship Management</td>
<td>DRMM402 Entrepreneurship in Retail Business</td>
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<tr>
<td>DRMM303 Operations Management</td>
<td>DRMM403 Rural Retailing</td>
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<td>DRMM304 IT in Retail</td>
<td>DRMM404 Retail Marketing Environment</td>
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<table>
<thead>
<tr>
<th>3rd Semester (Banking, Financial Services &amp; Insurance)</th>
<th>4th Semester (Banking, Financial Services &amp; Insurance)</th>
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<tbody>
<tr>
<td>DBFI301 Bank Management &amp; financial risk management</td>
<td>DBFI401 ALM &amp; Treasury Management</td>
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<tr>
<td>DBFI302 FINANCIAL STATEMENT ANALYSIS &amp; BUSINESS VALUATION</td>
<td>DBFI402 BASEL REGULATIONS &amp; RISK MANAGEMENT IN BANKING</td>
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<tr>
<td>DBFI303 PRINCIPLES &amp; PRACTICES OF INSURANCE</td>
<td>DBFI403 Life Insurance Management</td>
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<td>DBFI304 Financial Services</td>
<td>DBFI404 GENERAL INSURANCE MANAGEMENT</td>
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<th>3rd Semester (IT and FinTech)</th>
<th>4th Semester (IT and FinTech)</th>
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<tr>
<td>DITF301 Database Management Systems</td>
<td>DITF401 eCommerce</td>
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<tr>
<td>DITF302 Software Engineering</td>
<td>DITF402 FinTech Payments and Regulations</td>
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<tr>
<td>DITF303 Technology Management</td>
<td>DITF403 Cryptocurrency and Blockchain</td>
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<tr>
<td>DITF304 Business Intelligence and Tools</td>
<td>DITF404 Enterprise Resource Planning</td>
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<table>
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<tr>
<th>3rd Semester (Operations Management)</th>
<th>4th Semester (Operations Management)</th>
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<tr>
<td>DOMS301 Production and Operations Management</td>
<td>DOMS401 Services Operations Management</td>
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<tr>
<td>DOMS302 Enterprise Resource Planning</td>
<td>DOMS402 Total Quality Management</td>
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<tr>
<td>DOMS303 Logistics and Supply chain Management</td>
<td>DOMS403 Production, Planning and Control</td>
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<tr>
<td>DOMS304 Operations Research</td>
<td>DOMS404 Project Management</td>
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5.2.2. Detailed syllabus

**SEMESTER – I**

<table>
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<tr>
<th>Course Code- DMBA101</th>
<th>MANAGEMENT PROCESS AND ORGANISATIONAL BEHAVIOUR</th>
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**Learning objectives:**

- To make students understand fundamental concepts of management and organizational behavior.
- To understand the basic concepts and theories underlying individual behavior besides developing better insights into one's own self.
- To make students aware of Individual behavior in groups, dynamics of groups and team besides developing a better awareness of how they can be better facilitators for building effective teams as leaders themselves.
- To understand fundamentals of behaviour dynamics in an organization.


**Unit II – Introduction to management and management process: Introduction, Importance of Management, Evolution of Management Thought, Principles of Management, Management Process/Functions, and a System View**

**Unit II – Planning and decision making: Introduction, Importance of Planning, Types of Planning, Steps in Planning, Decision Making, Model in Planning and Decision Making**

**Unit IV – Organizing and staffing: Introduction, Importance of Organizing, Types of Organizations, Organizational division and span of control, Types of Departmentation, Staffing and its importance in the organization, Line and staff concept, Staffing concept and HR Management**

**Unit V – Leading: Introduction, Comparison and Contrasting of Directing and Leading, Characteristics of Leading, Importance of Leading, Functions of Leading**

**Unit VI – Controlling: Introduction, Importance and Process, Critical Control Points. Control as a feedback system, Prerequisites of Effective Control, Control Techniques, IT Enabled ‘Controls’ and its Challenges**


**Unit VIII – Individual level behavioural variables – 1 (Personality, Perception): Introduction, Personality, Definition and Determinants, Personality Traits, Personality Attributes affecting OB, Definition, Importance and Factors Influencing Perception, Perception and Making Judgment about Others**
### Learning objectives:
- To understand the Business etiquettes
- To organize and express ideas in writing and speaking to produce messages suitably tailored for the topic, objective, audience, communication medium and context.
- To understand the personal communication and media management

### Course Code- DMBA102 BUSINESS COMMUNICATION

<table>
<thead>
<tr>
<th>Unit</th>
<th>Title</th>
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<tbody>
<tr>
<td>IX</td>
<td>Individual level behavioural variables – 2 (Values, Attitudes and Emotions): Introduction, Values, Attitudes, Definition and Concept of Emotions, Emotional Intelligence, Indian Perspective on EI</td>
</tr>
<tr>
<td>X</td>
<td>Individual level behavioural variables – 3: Introduction, Learning and its Applications in Organizations. Definition and Importance of Motivation, Early Theories in Motivation, Contemporary Theories in Motivation, Motivational Tools in Organization</td>
</tr>
<tr>
<td>XII</td>
<td>Group level behavioural- 2 (The team): Introduction, Definition and Overview of a Team, Seventeen Characteristics of an Effective Team, Designing a Team –Team Wheel, Key Issues in Team Building, The Seven Step of Intact Team Building, Cross Functional Teams</td>
</tr>
<tr>
<td>XIII</td>
<td>Group level behaviour- 3 (Leadership): Introduction, Overview of Leadership, Role of Leadership in Contemporary Business, Theories of Leadership, Contingency Theories of Leadership, New Leadership Theories</td>
</tr>
<tr>
<td>XIV</td>
<td>Power, politics, conflict, negotiation and stress: Introduction, Power, Politics, Conflict, Negotiations, Stress</td>
</tr>
<tr>
<td>XV</td>
<td>Culture and change: Introduction, Concept of Culture, Fundamentals of Culture, Fundamentals of Change, Eight Steps of John Kotter on Leading Change</td>
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</table>

### Reference Book:
Management Process & Organisation Behaviour, Sahni NK, Kalyani Publishers
Communication, Communication Network in Organizations

**Unit IV** – The Importance of Listening in the Workplace: Introduction, what is listening? Barriers to Listening, Strategies for Effective Listening, Listening in a Business Context

**Unit V** – Guidelines for Written Business Communication: Introduction, General Principles of Writing, Principles of Business Writing


**Unit VII** – Reading Skills for Effective Business Communication: Introduction, what is reading? Types of reading, SQ3R Technique of Reading

**Unit VIII** – Internal Business Communication: Guidelines for Meetings: Introduction, Types of Meetings, Before the Meeting, During the Meeting, After the Meeting, and Common Mistakes made at Meetings

**Unit IX** – Internal Business Communication: Writing Memos, Circulars and Notices: Introduction, What is a Memo? Circulars and Notices

**Unit X** – Internal Business Communication – Electronic Media and Shareholder Communication: Introduction, what is an Intranet? Communicating through Email, Communication with Shareholders


**Unit XII** – Other Forms of External Business Communication: Introduction, Communication with Media through News Releases, Communication about the Organization through Advertising


**Unit XIV** – Employment Communication – Resumes and Cover Letters: Introduction, Writing a Resume, Writing Job Application Letters, Other Letters about Employment

**Unit XV** – Employment Communication – Group Discussions and Interviews: Introduction, What is a Group Discussion? Attending Job Interviews

**Textbook:**
Business Communication, Meenakshi Raman, Oxford Publishers

**Reference Book:**
Business Communication Today, Courtland L. Bovee, John V. Thill, Pearson
<table>
<thead>
<tr>
<th>Course Code-DMBA103</th>
<th>STATISTICS FOR MANAGEMENT</th>
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Learning objectives:
- Make the students aware about important techniques used in data collection, data representation, statistical analysis, and decision making
- Have general understanding about Statistics and to develop the skills to identify the appropriate statistical techniques for the analysis of data
- Enable them to format the quantitative information to present to decision makers and apply statistical techniques to data sets, analyse and correctly interpret the results in different situations
- Provide them exposure for data analysis, regression and time series analysis, for decision-making, by using spreadsheet and apply computer-generated statistical output to solve problems
- Enable them to critically analyse complex business issues and recommend sound solutions, in local and global markets.
- Enable them to use Microsoft Excel as a powerful tool to perform data analysis.


**Unit II – Statistical Survey:** Introduction, Definition of Statistical Survey, Stages of Statistical Survey - Planning of a Statistical Survey - Execution of Statistical Survey, Basic Terms used in Statistical Survey - Units or Individuals - Population or Universe – Sample - Quantitative - Characteristic - Qualitative Characteristic – Variable, Collection of Data - Primary Data - Secondary Data - Pilot survey, Scrutiny and Editing of Data

**Unit III – Classification, Tabulation and Presentation of Data:** Introduction, Functions of Classification - Requisites of a good classification - Types of classification - Methods of classification, Tabulation - Basic difference between classification and tabulation - Parts of a table - Types of table, Frequency and Frequency Distribution - Derived frequency distributions - Bivariate and multivariate frequency distribution - Construction of frequency distribution, Presentation of Data – Diagrams, Graphical Presentation - Histogram - Frequency polygon - Frequency curve - Ogives

**Unit IV – Measures of Central Tendency and Dispersion:** Introduction, Objectives of statistical average, Requisites of a Good Average, Statistical Averages - Arithmetic mean - Properties of arithmetic mean - Merits and demerits of arithmetic mean, Median - Merits and demerits of median, Mode - Merits and demerits of mode, Geometric Mean, Harmonic Mean, Appropriate Situations for the Use of Various Averages, Positional Averages, Dispersion – Range - Quartile deviations, Mean deviation, Standard Deviation - Properties of standard deviation, Coefficient of Variance

**Unit V – Theory of Probability:** Introduction - Definition of probability - Basic terminology used in probability theory, Approaches to probability, Rules of Probability - Addition rule -
### Multiplication rule, Conditional Probability, Steps Involved in Solving Problems on Probability, Bayes’ Probability, Random Variables

**Unit VI** – Theoretical Probability Distributions: Introduction - Random variables, Probability Distributions - Discrete probability distributions - Continuous probability distributions, Bernoulli Distribution - Repetition of a Bernoulli experiment, Binomial Distribution - Assumptions for applying a binomial distribution - Examples of binomial variate - Recurrence formula in case of binomial distribution - Case study on binomial distribution Poisson Distribution - Assumptions for applying the Poisson distribution - Real life examples of Poisson variate - Recurrence relation - Case study on Poisson distribution, Normal Distribution - Standard Normal Distribution


**Unit IX** – Testing of Hypothesis in Case of Large and Small Samples: Introduction – Large Samples – Assumptions, Testing Hypothesis - Null and alternate hypothesis - Interpreting the level of significance - Hypotheses are accepted and not proved, Selecting a Significance Level - Preference of type I error - Preference of type II error - Determine appropriate distribution, Two – Tailed Tests and One – Tailed Tests - Two – tailed tests - Case study on two –tailed and one-tailed tests, Classification of Test Statistics - Statistics used for testing of hypothesis - Test procedure - How to identify the right statistics for the test, Testing of Hypothesis in Case of Small Samples - Introduction – small samples, ‘t’ Distribution , Uses of ‘t’ test

**Unit X** – Chi – Square Test: Introduction, Chi-Square as a Test of Independence - Characteristics of χ² test - Degrees of freedom - Restrictions in applying χ² test - Practical applications of χ² test - Levels of significance - Steps in solving problems related to Chi-Square test - Interpretation of Chi-Square values , Chi-Square Distribution - Properties of χ² distribution - Conditions for applying the Chi-Square test - Uses of χ² test, Applications of Chi-Square test - Tests for independence of attributes - Test of goodness of fit - Test for specified variance

**Unit XI** – Distribution and Analysis of Variance (ANOVA): Introduction, Analysis of Variance (ANOVA), Assumptions for F-test - Objectives of ANOVA - ANOVA table - Assumptions for study of ANOVA, Classification of ANOVA - ANOVA table in one-way ANOVA - Two-way classifications
Unit XII – Simple Correlation and Regression: Introduction, Correlation - Causation and Correlation - Types of Correlation - Measures of Correlation - Scatter diagram - Karl Pearson’s correlation coefficient - Properties of Karl Pearson’s correlation coefficient - Factors influencing the size of correlation coefficient, Probable Error - Conditions under which probable error can be used, Spearman’s Rank Correlation Coefficient, Partial Correlations, Multiple Correlations, Regression - Regression analysis - Regression lines - Regression coefficient, Standard Error of Estimate, Multiple Regression Analysis, Reliability of Estimates, Application of Multiple Regressions


Unit XV – Index Numbers: Introduction, Definition of an Index Number – Relative - Classification of index numbers, Base year and current year - Chief characteristics of index numbers - Main steps in the construction of index numbers, Methods of Computation of Index Numbers – Un-weighted index numbers - Weighted index numbers, Tests for Adequacy of Index Number Formulae, Cost of Living Index Numbers of Consumer Price Index - Utility of consumer price index numbers - Assumptions of cost of living index number - Steps in construction of cost of living index numbers, Methods of Constructing Consumer Price Index - Aggregate expenditure method - Family budget method - Weight average of price relatives, Limitations of Index Numbers, Utility and Importance of Index Numbers

Textbook:

Statistics for Managers using Microsoft Excel, Levine, Stephan, Szabat, Pearson

Reference Book:

Business Statistics, J K Sharma, Vikas Publishing House

| Course Code- DMBA104 | FINANCIAL AND MANAGEMENT ACCOUNTING |

Learning objectives:

• To be able to prepare financial statements of an organisation
- To be able to analyse the financial statements of an organisation
- To apply the various concepts in profit planning and analysis
- To find out the problems faced by organisation and provide possible solutions
- Acquire skills required to use management accounting information to make business decisions

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<tr>
<td>Unit III – Double Entry Accounting: Introduction, Meaning of double entry accounting, Classification of accounts under Traditional approach, Classification of accounts under Accounting Equation approach, Comparison of traditional approach with Modern approach, equal approach, Accounting Trail, Transactions and events, Meaning and roles of debit and credit, Accounting equation</td>
</tr>
<tr>
<td>Unit V – Trial Balance: Introduction, Meaning, Objectives of preparing a trial balance, Methods of preparing a trial balance, Preparation of Trial balance, Adjusting Entries, Errors and their rectification, Errors disclosed by Trial Balance, Errors not disclosed by Trial Balance, Steps to locate the errors</td>
</tr>
<tr>
<td>Unit VI – Final Accounts: Introduction, Adjustments before preparing final accounts, Depreciation, Bad Debts and accounting treatment of bad debts, Provision for doubtful debts, Reserves for Discount on Debtors, Reserve for Discount on Creditors, Closing Stock, Trading Account, Profit and Loss Account, Balance Sheet</td>
</tr>
</tbody>
</table>
Unit VIII – Financial Statement Analysis: Introduction, Meaning of Ratio, Steps in Ratio Analysis, Classification of Ratios, Du Pont Chart, Solved Problems, Advantages of Ratio Analysis, Limitation of Ratio analysis


Unit XI – Understanding Cost: Introduction, Meaning of Cost, Objective of Costing, Methods of Costing, Technique of Costing, Classification of Cost, Elements of Cost, Statement of Cost Sheet, Solved Problems

Unit XII – Marginal Costing and Break Even Analysis: Introduction, Concept of Marginal Costing, Characteristics of Marginal Costing, Difference between Absorption Costing and Marginal Costing, Marginal Cost, Contribution, Cost Volume Profit (CVP) Analysis, Break Even Chart, Break Even Point, Profit Volume ratio or MCSR, Target profit, Margin of Safety, Application of Marginal cost, Limitations of Marginal cost, Solved Problems

Unit XIII – Decisions Involving Alternative Choices: Introduction, Decision Making, Types of Costs, Types of Choices Decisions, Make or Buy Decisions, Addition/Discontinuance of a Product line, Sell or Process Further, Operate or Shut down, Exploring New Markets, Maintaining a desired level of profit

Unit XIV – Budgetary Control: Introduction, Meaning of a Budget, Budgetary control, Objectives of budgetary control, Merits of budgetary control, Essential features of Budgetary Control, Steps in budgetary Control, Types of Budgets, Cast Budget, Flexible Budget, Limitation of Budget Control


Textbook:
Financial & Management Accounting, Williams, Bettner, Carcello & Haka, Tata McGraw Hill

Reference Book:
Financial & Management Accounting, Wild, Shaw and Chiappetta, Tata McGraw Hill

Course Code- DMBA105 | MANAGERIAL ECONOMICS

Learning objectives:
- To understand how demand and supply functions in the economy
- To appreciate the cost and revenue functions
- To understand how various markets function in the real market
- To understand the various functions-consumption, savings and investment
- To analyze the problems of inflation, fiscal and current account deficits

### Unit I – Meaning and Importance of Managerial Economics: Introduction, Meaning, Scope of Managerial Economics, Importance of the study of Managerial Economics, Two Major Functions of a Managerial Economist

### Unit II – Demand Analysis: Introduction, Meaning and Law of Demand, Elasticity of Demand

### Unit III – Demand Forecasting: Introduction, Meaning and Forecasting, Level of Demand Forecasting, Criteria for Good Demand Forecasting, Methods or Techniques of Demand Forecasting, Survey Methods, Statistical Methods, Demand Forecasting for a New Product


### Unit V – Production Analysis: Introduction, Meaning of Production and Production Function, Cost of Production


### Unit VII – Objectives of Firm: Introduction, Profit Maximization Model, Economist Theory of the Firm, Cyert and March’s Behavior Theory, Marris’ Growth Maximisation Model, Baumol’s Static and Dynamic Models, Williamson’s Managerial Discretionary Theory


### Unit X – Pricing Under Imperfect Competition: Introduction, Monopoly, Price Discrimination under Monopoly, Bilateral Monopoly, Monopolistic Competition, Oligopoly, Collusive Oligopoly and Price Leadership, Duopoly, Industry Analysis

### Unit XI – Macro Economics and some of its measures: Introduction, Basic Concepts, Macroeconomic Ratios, Index Numbers, National Income Deflators

### Unit XII – Consumption Function and Investment Function: Introduction, Consumption Function, Investment Function, Marginal efficiency of capital and business expectations, Multiplier, Accelerator
Unit XIII – Stabilization Policies-Introduction, Economic Stability, Instruments of economic Stability, Monetary Policy, Fiscal Policy, Physical Policy or Direct Controls

Unit XIV – Business Cycle- Introduction, Meaning and Features, Theories of Business Cycles, Measures to Control Business Cycles, Business Cycles and Business Decisions

Unit XV – Inflation and Deflation: Inflation - Meaning and Kinds, Measures to Control Inflation, Deflation

Textbook:  
Managerial Economics, D.N. Dwivedi, Vikas Publishing House

Reference Book:  
Managerial Economics, Principles and Wide Applications, Dominick Salvatore, Oxford

| Course Code- DMBA106 | HUMAN RESOURCE MANAGEMENT |

Learning objectives:  
- Understand Human resource Management and its relevance in an organization  
- Understand the process of recruitment, selection & forecasting technique and talent management in organizations for skill development  
- Apply techniques of recruitment and selection  
- Learn about Performance management, performance appraisal technique, training, succession planning and career development and their implementation  
- Design and formulate various HRM processes such as Recruitment, Selection, Training, Development, Performance appraisals and Reward Systems, Compensation Plans and Ethical Behaviour


Unit II – HRM in India: Introduction, Changing Role of Human Resource in India, Globalization, Its Impact on HR


Unit IV – Recruitment and Selection: Concept of Recruitment, Factors Affecting Recruitment, Sources of Recruitment, Recruitment Policy, Selection, Selection Process, Application Forms, Selection Test, Interviews, Evaluation, Placement, Induction

Unit V – Training and Management Development: Meaning of Training, Area of Training, Methods of Training, Concept of Management Development, Management Development Methods, Differences Between Training and Development, Evaluation of Training and Management Development

Unit VI – Employee Career Planning and Growth: Concept of Employee Growth, Managing Career Planning, Elements of a Career Planning Programme, Succession Planning
Unit VII – Performance Appraisal: Concept and Need for Performance, Reviews, Overview of Performance Appraisal, Types of Appraisal Methods, 360-degree appraisal, Benefits

Unit VIII – Compensation Management: Wage and Salary Administration, Managing Wages, Concept of Rewards and Incentives, Managing Benefits in Organisations

Unit IX – Job Evaluation: Concept of Job Evaluation, Objectives, Techniques, Advantages and Limitations, Introduction to Competency

Unit X – Human Resource Information System: Introduction, Concept, Components, Types, Application, Implementation, Benefits, Impact

Unit XI – Job Analysis and Design: Concept of Job Analysis and Design, Process of Job Analysis, Methods of Job Analysis, Job Analysis Information, Concept of Job Design


Unit XIII – Grievance and Grievance Procedure: Concept of Grievance, Causes of Grievances, Forms and Effects of Grievance, the Grievance Handling Procedure, Need for Grievance Redressal Procedure


Unit XV – Emerging Trends in HRM: Competency Mapping, Business Process Outsourcing, Right Sizing of Workforce, Flexi time, Talent Management, Employee Engagement

Textbook:
Human Resource Management, R C Sharma & Nipun Sharma, SAGE

Reference Book:
Human Resource Management Robert N. Lussier, John R. Hendon, SAGE

SEMESTER – II

Course Code- DMBA201  PRODUCTION AND OPERATIONS MANAGEMENT

Learning objectives:
- Understand the importance of production and operations management in an organization and its relevance to the organization
- Able to apply different techniques of production management to achieve organizational objectives
- Able to apply different techniques related to operations management for achieving organizational objectives
- Identify the problems faced by an organization related to production and operations management and provide possible solutions for the problem

<table>
<thead>
<tr>
<th>Unit I</th>
<th>– Production Management: Integrated Production Management, System Productivity, Capital Productivity, Labour Productivity, Personnel Productivity, Training</th>
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<tbody>
<tr>
<td>Unit IV</td>
<td>– Forecasting: Introduction, The Strategic Importance of Forecasting, Benefits, Cost implications and Decision making using forecasting, Classification of Forecasting Process, Methods of Forecasting, Forecasting and Product Life Cycle, Selection of the Forecasting Method, Qualitative Methods of Forecasting, Quantitative Methods, Associative Models of Forecasting, Accuracy of Forecasting</td>
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<tr>
<td>Unit V</td>
<td>– Location Strategies: Introduction, Location Planning Process</td>
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<td>Unit VI</td>
<td>– Facility or Layout Planning and Analysis: Introduction, Objectives of Layout, Classification of Facilities, Basis for Types of Layouts, Why Layout decisions are important, Nature of layout problems, Redesigning of a layout, Manufacturing facility layouts, Types of Layouts, Layout Planning, Evaluating Plant Layouts, Assembly Line Balancing, Material handling</td>
</tr>
<tr>
<td>Unit VII</td>
<td>– Total Quality Management: Introduction, Meaning and Dimensions of Quality, Quality Control Techniques, Quality Based Strategy, Total Quality Management (TQM), Towards TQM – ISO 9000 as a Platform – Working with Intranet, Total Productive Maintenance (TPM)</td>
</tr>
</tbody>
</table>
Strategies, Planning Options. Selecting the Method in Aggregate Planning, Aggregate Planning in Services

Unit XII – Supply Chain Management: Introduction, Domain Applications, SCM– The Breakthrough Article, Supply Chain Management, Views on Supply Chain, Bullwhip Effect in SCM, Collaborative Supply Chain, Inventory Management in Supply Chain, Financial Supply Chain – A New Revolution within the SCM Fold

Unit XIII – Operations Scheduling: Introduction, Purpose of Operations Scheduling, Factors considered while Scheduling, Scheduling Activity under PPC, Scheduling Strategies, Scheduling Guidelines, Approaches to Scheduling, Scheduling Methodology [Quantitative], Scheduling in Services

Unit XIV – Value Engineering: Introduction, Value Engineering/Value Analysis, Relevance of VE in Modern Manufacturing, Process of Value Analysis, VE – Approaches and Aim, Providing Value to the Customers, Benefits

Unit XV – Just-In-Time: Introduction, Characteristics of JIT, Key Processes to Eliminate Waste, Implementation of JIT, Pre-requisites for implementation, JIT Inventory and Supply Chains

Textbook:
Production & Operation Management, Panneerselvam, Prentice Hall India

Reference Book:
Production & Operation Management, S.N. Chary, McGraw Hill

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<tr>
<th>Course Code- DMBA202</th>
<th>FINANCIAL MANAGEMENT</th>
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Learning objectives:
- Understand the importance of finance and financial management in an organization and its relevance to the organization
- Able to apply different techniques of financial management to achieve organizational objectives
- Identify the problems faced by an organization related to financial management and provide possible solutions for the problem


Unit III – Time Value of Money: Introduction, Rationale, Future Value, Present Value
Unit IV – Valuation of Bonds and Shares: Introduction, intrinsic value, book value, Valuation of Bonds, Valuation of Shares

Unit V – Cost of Capital: Introduction, Meaning of Cost of Capital, Cost of Different Sources of Finance, Weighted Average Cost of Capital

Unit VI – Leverage: Introduction, Operating Leverage, Application of operating leverage, Financial Leverage, Combined Leverage

Unit VII – Capital Structure: Introduction, Features of an Ideal Capital Structure, Factors Affecting Capital Structure, Theories of Capital Structure


Unit IX – Risk Analysis in Capital Budgeting: Introduction, Types and Sources of Risk in Capital Budgeting, Risk Adjusted Discount Rate, Certainty Equivalent Approach, Probability Distribution Approach, Sensitivity Analysis, Simulation Analysis, Decision Tree Approach

Unit X – Capital Rationing: Introduction, Types, Steps Involved in Capital Rationing, Various Approaches to Capital Rationing


Unit XII – Cash Management: Introduction, Meaning and Importance of Cash Management, Motives for Holding Cash, Objectives of Cash Management, Models for Determining Optimal Cash Needs, Cash Planning, Cash Forecasting and Budgeting

Unit XIII – Inventory Management: Introduction, Role of Inventory in Working Capital, Characteristics of inventory, Purpose of Inventory, Costs Associated with Inventories, Inventory Management Techniques, Importance of Inventory Management Systems

Unit XIV – Receivable Management: Introduction, Costs Associated with Maintaining Receivables, Credit Policy Variables, Evaluation of Credit Policy


Textbook:
Financial Management: Theory and Practice, Chandra, P., McGraw Hill Education

Reference Book:
Principles of Corporate Finance, Brealey, R., Myers, S., Allen, F. and Mohanty, P., McGraw Hill Education
Course Code- DMBA203  MARKETING MANAGEMENT

Learning objectives:
- Understand fundamental marketing concepts, theories and principles in areas of marketing
- Understand the role of marketing as a fundamental organizational policy process
- Analyse the interaction of marketing and environmental forces through an understanding of marketing decisions
- Apply the knowledge, concepts, tools necessary to understand challenges and issues of marketing

Unit I– Introduction to Marketing Management: Introduction, Market and Marketing, the Exchange Process, Core Concepts of Marketing, Functions of Marketing, Importance of Marketing, Marketing Orientations

Unit II – The Marketing Process: Introduction, Marketing Mix-The Traditional 4Ps, The Modern Components of the Mix- The Additional 3Ps, Developing an Effective Marketing Mix, Marketing Planning, Marketing Implementation and Control

Unit III – Marketing Environment: Introduction, Environmental Scanning, Analysing the Organization’s Microenvironment, Company’s Macro Environment, Differences between Micro and Macro Environment, Techniques of Environment Scanning

Unit IV – Understanding the Marketing-Information Systems (MIS): Introduction, Characteristics of MIS, Benefits, Types, Components, Marketing Research


Unit IX – Product Management-Brand and Branding Strategy: Introduction, Brand and
Branding, Advantages and disadvantages of branding, Brand Equity, Brand Positioning, Brand Name Selection, Brand Sponsorship, Brand Development

Unit X – Pricing: Introduction, Factors Affecting Price Decisions, Cost Based Pricing, Value Based and Competition Based Pricing, Product Mix Pricing Strategies, Adjusting the Price of the Product, Initiating and Responding to the Price Changes

Unit XI – Distribution Management: Introduction, Need for Marketing Channels, Decisions Involved in Setting up the Channel, Channel Management Strategies, Introduction to Logistics Management, Introduction to Retailing, Wholesaling


Unit XIV – Customer Relationship Management and Other Contemporary Issues: Introduction, Relationship Marketing Vs. Relationship Management, Definitions of Customer Relationship Management (CRM), Forms of Relationship Management, Managing Customer Loyalty and Development, Reasons Behind Losing Customers by Organisations, Significance of Customer Relationship Management, Social Actions Affecting Buyer-Seller Relationships, Rural Marketing, Services Marketing, E-Marketing or Online Marketing


Textbook:

Reference Book:
Marketing, P. Baines, C. Fill, S. Rosengren, P. Antonetti, Oxford University Press

Course Code- DMBA204 MANAGEMENT INFORMATION SYSTEM

Learning objectives:
- To describe the role of information technology and decision support systems in business and record the current issues with those of the firm to solve business problem
- To introduce the fundamental principles of computer-based information systems analysis and design and develop an understanding of the principles and techniques used.
• To enable students understand the various knowledge representation methods and different expert system structures as strategic weapons to counter the threats to business and make business more competitive.

• To enable the students to use information to assess the impact of the Internet and Internet technology on electronic commerce and electronic business and understand the specific threats and vulnerabilities of computer systems


Unit II – Managing Information Systems in Organisations: Introduction, Managing in the Internet Era, Managing Information Systems in Organisation-the IT interaction model, Challenges for the manager-what information to build?-how much to spend on information systems?-what level of capabilities should be created with information systems?-how centralized should the services be? What security levels are required? What is technology road map for the organization?

Unit III – Data and Information: Introduction, data and information- measuring data, information as a resource, information in Organizational functions, types of information technology, types of information systems- transaction processing systems-management information systems

Unit IV – Decision making and communication: Introduction, Decision making with MIS-Tactical decisions-operational decisions-strategic decisions, communication in organisations-types of communication- examples of communications in organisations- decision making with communication technology

Unit V – Competing with IT: Introduction, The competitive environment of business- partnering for mutual benefit- bargaining power of suppliers-bargaining power of buyers and customers-barriers to entry-threat of substitutes-industry regulations, Using IT for competing-competing on low cost-competing on differentiation

Unit VI – IT strategy: Introduction, Information goods-properties-technology lock-in and switching costs-network externalities-positive feedback-tippy markets, information systems and competitive strategy- value chain, the Role of CIO-information system’s plan-vendor coordination-technology updates-return on investment on technology


Unit X – Decision Support Systems: Introduction, Understanding DSS- MIS and DSS- Decision making-types of decisions, Analytics and Business Intelligence- BI techniques


Unit XII – Managing Social Media: Introduction, Social Dynamics of the Internet, Services of the Internet- Blogs-Social Networks, Technology of the Internet- Twitter-Rating-Tagging/folksonomies, Social issues-Media impact-Collaboration-Emergence of order, Social Networks in the Enterprise

Unit XIII – Managing IT Function: Introduction, Challenges of Managing the IT function- Modern IT environment-Centralisation versus Decentralisation-IT security-Technology selection, Vendor Management- vendor selection-vendor contracts and service levels-Ongoing relationship management- vendor retention or termination

Unit XIV – Ethical Issues: Introduction, Key issues- Privacy-Workplace Monitoring- Power over users

Textbook:
Management Information System, A.K Gupta, Sultan Chand

Reference Book:

Course Code- DMBA205 OPERATIONS RESEARCH

Learning objectives:
- To be familiar with the relationship of operations research with other key functional areas of the firm
- To understand the role of operations research in the overall business strategic decisions of the firm
- Have the general understanding about the basic and advanced tools and techniques used in operations research.
- Develop an understanding of the application of the important tools and techniques of operations research to the service sector
• To be able to identify and apply the appropriate operations research techniques as well as their evaluation to analyse the data, for taking the right decision or to solve the problems

• Be equipped with the required breadth and depth of technical and managerial competencies of operations research, in order to function successfully in the chosen operational area

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<tr>
<td>Unit II – Linear Programming: Introduction, Linear Programming Problem, Requirements of LPP, Mathematical Formulation of LPP, Case Studies of LPP, Graphical Methods to Solve Linear Programming Problems, Applications, Advantages, Limitations</td>
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<tr>
<td>Unit III – Graphical Analysis of Linear Programming Problems: Introduction, Graphical Analysis, Some Basic Definitions, Graphical Methods to Solve LPP, Some Exceptional Cases, Important Geometric Properties of LPP</td>
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<tr>
<td>Unit V – Duality in Linear Programming Problem: Introduction, Importance of Duality Concepts, Formulation of Dual Problem, Economic Interpretation of Duality, Sensitivity Analysis</td>
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<td>Unit VI – Transportation Problem: Introduction, Formulation of Transportation Problem (TP), Transportation Algorithm (MODI Method), the Initial Basic Feasible Solution, Moving Towards Optimality</td>
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<td>Unit VII – Assignment Problem: Introduction, Mathematical Formulation of the Problem, Hungarian Method Algorithm, Routing Problem, Travelling Salesman Problem</td>
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<td>Unit VIII – Integer Programming Problem: Introduction, Types of Integer Programming Problems, Gomory’s All-IPP Method, All IPP Algorithm, Branch and Bound Technique</td>
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<td>Unit IX – Infinite Queuing Models: Introduction, Queuing Theory, Operating Characteristics of a Queuing System, Constituents of a Queuing System, Service Facility, Queue Discipline</td>
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<tr>
<td>Unit X – Mathematical Analysis of Queuing Theory: Introduction, Mathematical Analysis of Queuing Process, Properties of Queuing System, Notations, Service System, Single Channel Models, Multiple Service Channels, Erlang Family of Distribution of Service Times, Applications of Queuing Theory, Limitations of Queuing Theory</td>
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<tr>
<td>Unit XI – Finite Queuing Models: Introduction, Finite Queuing Models</td>
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<tr>
<td>Unit XII – Simulation: Introduction, Methodology of Simulation, Basic Concepts, Simulation Procedure, Application of Simulation</td>
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</table>
Unit XIII – Simulation Monte-Carlo Method: Introduction, Monte-Carlo Simulation, Applications of Simulation, Advantages of Simulation, Limitations of Simulation

Unit XIV – Project Scheduling and PERT-CPM: Introduction, Basic Difference between PERT and CPM, PERT/CPM Network Components and Precedence Relationship, Project Management – PERT

Unit XV – Game Theory: Introduction, Competitive Situations, Characteristics of Competitive Games, Maximin – Minimax Principle, Dominance

Textbook:

Reference Book:
Operations Research, Yadav, Malik, Oxford University Press

Course Code- DMBA206 PROJECT MANAGEMENT

Learning objectives:

- Manage the scope, cost, timing, and quality of the project, at all times focused on project success as defined by project stakeholders
- Identify project goals, constraints, deliverables, performance criteria, control needs, and resource requirements in consultation with stakeholders
- To be able to apply project management practices to the launch of new programmes, initiatives, products, services, and events relative to the needs of stakeholders
- Be able to analyze, apply and appreciate contemporary project management tools and methodologies.


Unit II – Project Identification and Selection: Introduction, Project Identification Process, Project Initiation, Pre-Feasibility Study, Feasibility Studies, Project Break-even point


Unit IV – Organizational Structure and Organizational Issues: Introduction, Concept of Organizational Structure, Roles and Responsibilities of Project Leader, Relationship between Project Manager and Line Manager, Leadership Styles for Project Managers, Conflict Resolution, Team Management and Diversity Management, Change management
Unit V – PERT and CPM: Introduction, Development of Project Network, Time Estimation, Determination of the Critical Path, PERT Model, Measures of variability, CPM Model, Network Cost System

Unit VI – Resources Considerations in Projects: Introduction, Resource Allocation, Scheduling, Project Cost Estimate and Budgets, Cost Forecasts


Unit VIII – Project Quality Management and Value Engineering: Introduction, Quality, Quality Concepts, Value Engineering

Unit IX – Project Management Information System: Introduction, Project Management Information System (PMIS), Planning of PMIS, Design of PMIS

Unit X Purchasing and Contracting for Projects: Introduction, Purchase Cycle, Contract Management, Procurement Process


Unit XII – Project Execution and Control: Introduction, Project Execution, Project Control Process, Purpose of Project Execution and Control

Unit XIII – Project Close-out, Termination and Follow-up: Introduction, Project Close-out, Steps for Closing the Project, Project Termination, Project Follow-up


Unit XV – Case Studies in Project Management

Textbook: Production & Operation Management, Panneerselvam, Prentice Hall India,


SEMESTER – III

| Course Code- DMBA301 | RESEARCH METHODOLOGY |

Learning objectives:
- Understand the concept, process and various Research Methods used in business research
- Understand the rationale underlying Research methods, especially in the real business world
- Be equipped with most of the important techniques used in data collection, data representation, statistical analysis, and decision making
- Be able to collect, analyse, present and interpret research data
- Be able to identify and apply the appropriate methods to do research and analyse the data in different situations and interpret the research outcome
- Be proficient to do statistical enquiry and analysis by using excel and other software like SPSS, etc.

<table>
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<tr>
<th>Unit I – Introduction to Research: Meaning of research, Types of research- Exploratory research, Conclusive research, The process of research, Research applications in social and business sciences, Features of a Good research study</th>
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<tr>
<td>Unit II – Research Problem and Formulation of Research Hypotheses: Defining the Research problem, Management Decision Problem vs Management Research Problem, Problem identification process, Components of the research problem, Formulating the research hypothesis, Types of Research hypothesis, Writing a research proposal, Contents of a research proposal and types of research proposals</td>
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<tr>
<td>Unit IV – Primary and Secondary Data: Classification of Data, Secondary Data, Uses, Advantages, Disadvantages, Types and sources, Primary Data Collection, Observation method, Focus Group Discussion, Personal Interview method</td>
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<tr>
<td>Unit V – Attitude Measurement and Scaling: Types of Measurement Scales, Attitude, Classification of Scales, Single item vs Multiple Item scale, Comparative vs Non-Comparative scales, Measurement Error, Criteria for Good Measurement</td>
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<tr>
<td>Unit VI – Questionnaire Design: Questionnaire method, Types of Questionnaires, Process of Questionnaire Designing, Advantages and Disadvantages of Questionnaire Method</td>
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<tr>
<td>Unit VII – Sampling: Sampling concepts- Sample vs Census, Sampling vs Non-Sampling error, Sampling Design, Probability and Non-Probability Sampling design, Determination of Sample size, Sample size for estimating population mean, Determination of sample size for estimating the population proportion</td>
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<tr>
<td>Unit VIII – Data Processing: Data Editing, Field Editing, Centralized in house editing, Coding, Coding Closed ended structured Questions, Coding open ended structured Questions, Classification and Tabulation of Data</td>
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</table>
| Unit IX – Univariate and Bivariate Analysis of Data: Descriptive vs Inferential Analysis, Descriptive Analysis of Univariate data- Analysis of Nominal scale data with only one possible
response, Analysis of Nominal scale data with multiple category responses, Analysis of Ordinal Scaled Questions, Measures of Central Tendency, Measures of Dispersion, Descriptive Analysis of Bivariate data

**Unit X** – Testing of Hypothesis: Concepts in Testing of Hypothesis, Steps in testing of hypothesis, Test Statistic for testing hypothesis about population mean, Tests concerning Means- the case of single population, Tests for Difference between two population means, Tests concerning population proportion- the case of single population, Tests for difference between two population proportions

**Unit XI** – Chi-square Analysis: Chi square test for the Goodness of Fit, Chi square test for the independence of variables, Chi square test for the equality of more than two population proportions

**Unit XII** – Analysis of Variance: Completely randomized design in a one-way ANOVA, Randomized block design in two-way ANOVA, Factorial design


**Unit XIV** – Ethics in Research: Meaning of Research Ethics, Clients Ethical code, Researchers Ethical code, Ethical Codes related to respondents, Responsibility of ethics in research

**Textbook:**

Research Methodology Concepts and Cases, Deepak Chawla, Neena Sondhi, Vikas Publishing House

**Reference Book:**

Business Research Methods, Cooper, Schindler, JK Sharma, Tata McGraw Hill

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<tr>
<th>Course Code- DMBA302</th>
<th>LEGAL ASPECTS OF BUSINESS</th>
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**Learning objectives:**

- Appreciate the relevance of business law to individuals and businesses and the role of law in an economic, political and social context
- Identify the fundamental legal principles behind contractual agreements
- Examine how businesses can be held liable in tort for the actions of their employees
- Acquire problem solving techniques and to be able to present coherent, concise legal argument

**Unit I** – Introduction to Business Law: Introduction, Meaning and Nature of Law, Sources of Indian Law, Legal Environment of Business, Mercantile Law, Some Basic Legal Concepts, Essentials of Law

**Unit II** – Law of contract: Introduction, Objectives, Definition of a Valid Contract, Offer and
Acceptance, Capacity to Contract, Consent, Consideration, Classification of Contracts, Performance of Contracts, Discharge of Contracts, Breach of Contract and Void Agreements, Quasi Contracts, Freedom to Contract

**Unit III** – Contracts of Guarantee and indemnity: Introduction, Contract of Indemnity, Contract of Guarantee, Kinds of Guarantee, Creditor, Surety

**Unit IV** – Contracts of Bailment and Pledge: Introduction, Bailment and its Kinds, Definition of bailment, Kinds of bailment, Bailor and Bailee, Termination of Bailment, Finder of Lost Goods, Pledge or Pawn, Pledge by Non-owners, Pledgor and Pledgee

**Unit V** – Contract of Agency: Introduction, Agent and Agency, Kinds of Agencies, Classification of Agents, Duties and Rights of Agents, Principal’s Duties to the Agent and his Liability to Third Parties, Personal Liability of Agent, Termination of Agency, Power of Attorney

**Unit VI** – Law of Partnership: Introduction, Meaning and Nature of Partnerships, Registration of Firms, Partnership Deed, Relations of Partners to One Another, Relations of Partners to Third Parties, Types of Partnerships, Changes in a Firm, Dissolution


**Unit VIII** – Law of Negotiable Instruments: Negotiable instruments, Promissory notes, Bills of exchange, Cheques, Negotiation, Presentment, Dishonour, Crossing of cheques, Paying banker

**Unit IX** – Banking and Insurance Law- Introduction, Control and Regulation of Banking, Insurance in India, Regulation of Insurance Sector, Reserve Bank of India, 1934, IRDA Act, 1999, LIC Act, 1956


**Unit XI** – The Competition Act- Introduction, Definitions, Enquiry into Certain Agreements and Dominant Position of Enterprise and Combinations, Miscellaneous Provisions, Finance, Accounts and Audit, MRTP Act, 1969


**Unit XIV** – Regulation to Information- Introduction, Right to Information Act, 2005, Information Technology Act, 2000, Electronic Governance, Secure Electronic Records and Digital
Signatures, Digital Signature Certificates, Cyber Regulations Appellate Tribunal, Offences, Limitations of the Information Technology Act, 2000

**Unit XV** – Intellectual Property Laws- Introduction, Legal Aspects of Patents, Filing of Patent Applications, Rights from Patents, Infringement of Patents, Penalty and Trademark Infringement, Legal Protection for Trade Secrets, Infringement of Geographical Indications and Remedies for Infringement, Copyright and its Ownership, Infringement of Copyright, Civil Remedies for Infringement,

**Textbook:**
Legal Aspects of Business, Pathak, A., Tata McGraw-Hill

**Reference Book:**
Legal Aspects of Business, Gupta, P., Vikas Publishing House

**FINANCE ELECTIVES**

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<tr>
<th>Course Code- DFIN301</th>
<th>SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT</th>
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</table>

**Learning objectives:**
- Get a basic understanding of fundamental concepts of investment scenarios, financial markets, instruments, market participants and their roles
- Gain knowledge with respect to valuation and analysis techniques of financial instruments and investment scenarios, and the various theories and techniques used in the portfolio management
- Be able to apply the relevant tools and techniques or do the valuation and analysis of financial instruments and investment scenarios in real life situations
- Be able to understand the working knowledge of portfolio management
- Be able to apply relevant tools and techniques or theories for valuation, or to do the selection, evaluation and revision of portfolios in real life situations

**Unit I** – Investment: A Conceptual Framework: Investment process, risks of investment and the common mistakes made in investment management

**Unit II** – Investment Environment: Features and composition of money market and capital market, money market, capital market instruments and financial derivatives

**Unit III** – Risk and Return: Concepts of risk and return, how risk is measured in terms of standard deviation and variance, the relationship between risk and return

**Unit IV** – Fundamental Analysis: Economy analysis, industry analysis and company analysis, weaknesses of fundamental analysis

**Unit V** – Technical Analysis: Tools of technical analysis, important chart formations or price patterns and technical indicators

**Unit VI** – Efficient Market Hypothesis: Concept of ‘Efficient Market’ and its implications for
security analysis and portfolio management

**Unit VII** – Behavioural Finance: Meaning of behavioural finance, deals with when, how and why psychology influences investment decisions

**Unit VIII** – Valuation of bonds and shares: Elements of investment, bond features and prices, call provisions on corporate bonds, convertible bonds and valuation of bonds

**Unit IX** – Portfolio Management: Risks and Returns: Concept of portfolio and portfolio management, concept of risk, types of portfolio management

**Unit X** – Markowitz Portfolio Selection Model: Concept of portfolio analysis and diversification of risk. Also discusses Markowitz Model and Efficient Frontier

**Unit XI** – Capital Asset Pricing Model (CAPM): Deals with the assumptions of CAPM and the inputs required for applying CAPM and the limitations of this Model

**Unit XII** – Sharpe-The Single Index Model: Measurement of return on an individual stock, measurement of portfolio returns and measurement of individual stock risk

**Unit XIII** – Factor Models and Arbitrage Pricing Theory: Arbitrage Pricing Theory and its principles, Comparison of Arbitrage Pricing Theory with the Capital Asset Pricing Model

**Unit XIV** – International Portfolio Investments: Investment avenues for foreign portfolio investors, risks and returns associated with such investment

**Unit XV** – Mutual Fund Operations: Mutual funds as a key financial intermediary, mobilizing savings and investing them in capital markets

**Textbook:**

Security Analysis and Portfolio Management, Ranganatham, Madhumati, Pearson

**Reference Book:**

Investment Analysis and Portfolio Management, Prasanna Chandra, Tata McGraw Hill

**Course Code- DFIN302** | **MERGERS AND ACQUISITIONS**

**Learning objectives:**

- Gain basic knowledge about corporate restructuring process
- Be acquainted with procedures of mergers and acquisitions
- Be acquainted with valuation methods, accounting treatment and applications
- Be familiar with legal and regulatory framework for mergers and acquisitions
- Be able to do the valuation prior to mergers and acquisitions
- Be familiar with the procedures of takeover defences and post-merger integrations

**Unit I** – Introduction to Mergers and Acquisitions: Meaning of mergers and acquisitions (M & A), motives behind the M & A, advantages and disadvantages of M & A, types of mergers and
steps for a successful merger

**Unit II – Strategic Evaluation of M & A Opportunities**: selection approaches and criteria, modalities of fixing the acquisition price, key steps in the strategic planning of a merger, feasibility analysis in respect of cash and stock deals, describes fair value: institutional criteria and special features of acquisition of sick companies

**Unit III – Strategising and Structuring M & A Activity**: Merger process right from planning the merger till implementation, five-stage model, methods of financial mergers and capital budgeting decision

**Unit IV – Synergy and Value Creation in Mergers**: Synergy and its different types, role of industry life cycle, value creation in synergy, theoretical factors that would affect M & A activity

**Unit V – Corporate Restructuring**: meaning of corporate restructuring, need for corporate restructuring, methods of corporate restructuring

**Unit VI – Demergers**: Meaning of demerger, characteristics of demerger, structure of demerger, and tax implication of demergers

**Unit VII – LBOs, MBOs, MLPs and ESOPs**: meaning of LBO, MBO, MLP, ESOP, governance and mode of purchase in LBO, key motives behind an MBO, structure of MBO, types of MLP and ESOP, regulations that govern ESOPs

**Unit VIII – Joint Ventures**: Meaning of joint ventures, characteristics of a joint venture, states the rationale for joint ventures, role of joint ventures in business strategy, defines joint venture and complex learning, tax aspects of joint ventures, international joint ventures, reasons for failure of joint ventures, and joint venture vis-à-vis anti-trust policy

**Unit IX – International M & A**: Introduction of international M & A activity, the opportunities and threats, role of M & A in international trade growth, the external advantages in differential products, impact of government policies and political and economic stability on international M&A decisions, recommendation for effective cross-border M & A

**Unit X – Takeover Defences**: Types of takeovers, techniques of bidding for a takeover, defences against takeover bids, regulations and amendments, and guidelines for takeovers

**Unit XI – Valuation**: valuation approaches, basis of valuation, different methods of valuation, valuation of synergy, corporate control and LBO

**Unit XII – Accounting for Amalgamation**: Meaning of amalgamation, types of amalgamation, methods of accounting for amalgamation, meaning of consideration, treatment of goodwill, reserves and other profits


**Unit XIV – Post-Merger Integration**: Integration planning, factors in post-merger integration model, post-merger integration model, strategic interdependence and autonomy, political and cultural aspects in integration, cultural profiling and assessment of cultural compatibility, HRM issues, and problems in integration and five rules of integration process
### Unit XV – Prominent Cases of Mergers and Acquisitions: Examples of M & A in the Indian and international contexts

**Textbook:**
Merger & Acquisitions & Corporate Restructurings, Patrick A. Gaughan, Wiley Publications

**Reference Book:**

**Course Code- DFIN303 | TAXATION MANAGEMENT**

**Learning objectives:**
- Be familiar with the basic taxation system of the country.
- Be aware of the structure of income tax, their exemptions and deductions.
- Be acquainted with capital gain tax and practical aspects of tax planning, as it is a part of or an important managerial decision-making process.
- Understand corporate taxation, its accounting, audit and various types of other taxation, which were/are the part of taxation system of our country.
- Be expose to real life situations involving taxation and be equipped with techniques for taking tax-sensitive decisions

### Unit I – Introduction to Taxation Management: Types of Taxes, concept, objectives and factors to be considered for Tax Planning. Tax Planning, Tax Evasion and Tax Avoidance. Tax Planning of Specific Categories of Income, including Income from House Property and Income from business

### Unit II – Structure, Taxable and Exempt Incomes, Set-offs: Broad Schema of Income Tax Law, Finance Acts. Rates of Taxes Applicable to Different Types of Taxpayers


### Unit IV – Taxation of Salaried Income: definition of salary, Fringe benefits and perquisites, Profit in lieu of salary and tax planning avenues for salary income


### Unit VI – Tax Planning for Firms, HUFs and AOPs: Partnership firm under Income Tax Law, tax deductions available to firms, Provisions relating to interest and remuneration paid to partner, Computation of partnership firms’ book profit, Set-off and carry-forward of losses of Firms and taxation of HUFs and Associations of Persons (AOPs)
Unit VII – Corporate Taxation: Computation of taxable income, Carry-forward and set-off of losses for companies, Minimum Alternative Tax (MAT), Set-off and Carry-forward of Amalgamation Losses, Tax Planning for Amalgamation, Merger and Demerger of Companies, Tax Provisions for Venture Capital Funds

Unit VIII – Tax Audit and Accounting for Income Tax: Tax Audit, Qualities and Qualifications Required in Tax Auditors, Forms, Reports and Returns and Tax Reporting and Disclosure in Financial Statements


Unit XI – Indirect Taxes: Central Excise, Customs Duty, Sales Tax and Value Added Tax (VAT), Service Tax, Entry Tax and Octroi and Purchase Tax

Unit XII – Service Tax: Service Tax Law in India, the concept of ‘Negative List’, Categorization of Taxable and Tax-free Services, Exemptions and Rebates from Service Tax, Provisions for Rectification of Mistakes and schemes of Assessment


Unit XIV – Tax Aspects of Operating and Financial Decisions: Tax implications of financing decisions, tax considerations of Dividend Policy

Textbook:
The Theory, Principles and Management of Taxation- An Introduction, Jane Frecknall Hughes, Routledge Taylor & Francis Group

Reference Book:
Business Taxation and Financial Decisions, Deborah and Sebastian Schanz, Springer

Course Code- DFIN304 | INTERNAL AUDIT AND CONTROL

Learning objectives:
- To be able to demonstrate the ability to plan and document the planning of the audit including the initial risk assessment, calculation of materiality and preparation of audit programmes
- Understand the concepts, processes and assessment of internal control
- Understand the ethical decisions than an auditor must make in the conduct of the audit from the client acceptance phase throughout the audit to the reporting process
- Demonstrate knowledge of the substantiation of balances and collection of audit evidence and preparation of audit work papers
Unit I – Financial Audit: Evolution of Financial auditing, idea of development of Financial Audit in India, auditing objectives, scope and philosophy of auditing, qualifications and qualities of an auditor, advantages and limitations of audit

Unit II – Types of Audit: General audits and specific audits, types of general audits and types of specific audits, continuous, periodical and balance sheet audits

Unit III – Internal Audit: Concept and objectives of internal audit, application of audit to different management functions, differences between internal and external audit, internal check and internal audit

Unit IV – The Internal Auditor: Qualifications for an internal auditor, need for independent functioning, relationship with the external auditor, code of ethics, qualities required in internal audit personnel, role of internal auditor as a management member

Unit V – Planning Internal Audit: Importance of planning internal audit, factors for a good plan, stages of internal audit planning. Knowledge of the business as an integral aspect, internal audit plan

Unit VI – Internal Audit Programme: Nature of internal audit programme, advantages and disadvantages, use of sampling techniques and use of tests

Unit VII – Internal Control: Concept and objectives of internal control, characteristics of an effective system of internal controls, elements and basic principles and inherent limitations

Unit VIII – Internal Check: Meaning and significance of internal check, objectives and characteristics of an effective internal check system, advantages and disadvantages

Unit IX – Internal Controls in Computer-based Systems: IT revolution, challenges in internal controls, aspects of internal controls applicable in IT environment and internal controls for computerised accounting

Unit X – Internal Controls on the Accounting Function: Internal control considerations, cash functions like Cash and bank, Salaries and employee benefits, Purchases and creditors, Sales and debtors, Inventories, Fixed assets and investments and other accounting activity

Unit XI – Evaluation of Internal Control Systems: Objectives of evaluation, steps in evaluation, techniques of evaluation, flowcharts and internal control questionnaires, internal control schemes

Unit XII – Dimensions of Internal Control: Internal control and risk assessment, internal control in banking and insurance, internal control for small and medium enterprises (SMEs), audit practices in relation to internal control, reporting of internal control weaknesses


Unit XIV – Internal Audit Reports: Features of a good internal audit report, importance of working papers, CARO – Companies (Auditors Report) Order 2003
Unit XV – Internal Audit in an EDP Environment: Audit planning in computerised environment, challenges for the auditor in an IT environment, internal audit practices in computerised systems, Computer assisted audit techniques (CAATs)

Reference Book: Internal Auditing: Assurance & Advisory Services, Kurt F. Reding, Ingram Book Company

MARKETING ELECTIVES

Course Code- DMKT301 | SALES DISTRIBUTION AND SUPPLY CHAIN MANAGEMENT

Learning objectives:
- To be acquainted with the concepts that are helpful in developing and managing sales force and marketing channels to gain competitive advantage
- To be familiar with the concepts, techniques and the practical aspects of the key decision-making variables in distribution channel management.
- To be able to develop sales and distribution plans and to be able to link distribution with other marketing variables.

Unit I – Overview of Sales Management: Introduction, Objectives, Role of Sales Management in Marketing, Role of Sales Management in Marketing Strategy Development, Nature and Responsibilities of Sales Management, Careers in Sales Management, Modern Roles and Required Skills for Sales Managers

Unit II – Understanding Personal Selling and Sales Force Management: Introduction, Objectives, Approaches to Personal Selling, Process of Personal Selling, Automation in Personal Selling, Organization Design and Staffing, Sales Planning, Time and Territory Management, Managing the Sales Force


Unit IV – Channel management: Introduction, Marketing Channels, Designing Channels, Selection and Recruitment of Channel Partners, Channel Motivation, Channel Relationships Management, Channel Evaluation, Information Systems for Channels


Unit VI – Retailing: Introduction, Definition of Retailers, Origin of Retailing, Scope of Retailing, Retailing Scenario: An Overview, Retailing: Importance and Success Factors, Retail Format

Unit VIII – The Basics of Supply Chain Management: Introduction, Definition of Supply Chain Management, Evolution of the Concept of Supply Chain Management, Key Drivers of Supply Chain Management, Typology of Supply Chains, Cycle View of Supply Chain, Problems in SCM and Suggested Solutions

Unit IX – Planning Demand and Supply: Introduction, Three Components of SCM, Demand Management, Demand Forecasting

Unit X – Planning Demand and Supply: Introduction, Supply Management, Evolution of ERP, Concept of ERP in SCM, Quick Response and Accurate Response System in SCM, Use of Other Planning Strategies

Unit XI – Procurement and Inventory Management: Introduction, Supply Chain Operations: Procurement Cycle, Inventory Management, Inventory Costs, Types of Inventory Models, Inventory Control Systems, Tools of Inventory Management


Unit XIII – Supply Chain Benchmarking: Introduction, Understanding the Benchmarking Concept, Benchmarking Process, Benchmarking Procedure


Textbook:
Fundamentals of Selling, Futrell, M. Charles, Tata McGraw Hill

Reference Book:
Sales Management: Analysis and Decision Making, Ingram, N. Thomas and LaForge, W. Raymond, Cengage Learning

Course Code- DMKT302 CONSUMER BEHAVIOUR

Learning objectives:
- To understand consumer behaviour in an informed and systematic way
- To analyse personal, socio-cultural, and environmental dimensions that influence consumer decisions making
- To be able to design and evaluate marketing strategies based on fundamentals of consumer buying behaviour

Unit I – Introduction to Consumer Behaviour and Consumer Research: Introduction,


**Unit III** – Consumer Motivation: Introduction, Needs and Goals, Motivational Conflict, Defense Mechanisms, Motive Arousal, Motivational Theories, Maslow's hierarchy of needs, Motivation Research

**Unit IV** – Consumer Personality: Introduction, Self-concept, Personality Theories, Brand Personality, emotions


**Unit VI** – Consumer Learning, Memory and Involvement: Introduction, Components of Learning, Behavioral Theory, Cognitive Learning Theory, Memory System, Memory Process, Concept of Involvement, Dimensions of Involvement, Involvement and Types of Consumer Behaviour, Cognitive Response Model, Elaboration Likelihood Model, Social Judgment Theory, Brand Loyalty and Brand Equity

**Unit VII** – Consumer Attitudes: Introduction, Functions of Attitude, Attitude Models, Factors that Inhibit Relationship between Beliefs, Feelings and Behaviour, Learning Attitudes, Changing Attitudes, Attitude Change Strategies, Theories of Attitude and Market Implications

**Unit VIII** – Consumer Behaviour and Marketing Communications: Introduction, Marketing Communication Flow, Communications Process, Interpersonal Communication, Persuasive Communications, source, message, message appeals, communication feedback

**Unit IX** – Cultural Influences on Consumer Behaviour: Introduction, Characteristics of Culture, Values, Sub-cultures, Cross-cultural Influences, Cultural Differences in Non-verbal Communications

**Unit X** –


Unit II – Retail Marketing Environment: Introduction, Understanding the Environment, Elements in a Retail Marketing Environment, Environmental Issues


Unit XII – Situational Influence on Consumer’s Decision and the Decision Models: Introduction, Nature of Situational Influence, Situational Variables, Types of Consumer Decisions, Nicosia Model of Consumer Decision-making (Conflict Model), Howard-Sheth Model (also called Machine Model), Engel, Blackwell, Miniard Model (also called Open System)

Unit XIII – Consumer Decision-making Process – Problem Recognition, Information Search and Evaluation of Alternatives: Introduction, Problem Recognition, Information Search, Evaluation of Alternatives, Factors of Consumer Decision Making and Importance of Pricing


Unit XV – Organizational Buying Behaviour: Introduction, Organizational Buyer Characteristics, Purchase and Demand Patterns, Factors Influencing Organizational Buyer Behaviour, organizational Buyer Decision Process, Organizational Buying Roles

Textbook: Consumer Behaviour, Schiffman, Kanauk and R. Kumar, Pearson
Reference Book: Consumer Behaviour: Buying, Having and Being, Solomon, R. Michael, Prentice Hall India

Course Code- DMKT303 RETAIL MARKETING

Learning objectives:
- To define retailing and understand the contemporary retail business scenario
- To understand the ways that retailers use marketing tools and techniques to interact with their customers
- To understand the role of Information Systems in the changing retail industry
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<tr>
<td>Unit IV – Store Location and Layout: Introduction, Types of Retail Stores Location, Factors Affecting Retail Location Decisions, Country/Region Analysis, Trade Area Analysis, Site Evaluation, Site Selection, Location Based Retail Strategies</td>
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<tr>
<td>Unit V – Retail Marketing Strategies: Introduction, Target Market and Retail Format, Strategy at different levels of Business, Building a Sustainable Competitive Advantage, the Strategic Retail Planning Process, Retail Models, Retail “EST” model</td>
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<tr>
<td>Unit VI – Store Location and Layout: Introduction, Target Market and Retail Format, Gauging Growth Opportunities, Building a Sustainable Competitive Advantage, the Strategic Retail Planning Process, Differentiation Strategies, Positioning Decisions</td>
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<td>Unit VII – Retail Merchandising: Introduction, Understanding Merchandising Management, Activities of a Merchandiser, Retail Merchandising Management Process</td>
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<td>Unit VIII – Private Branding in Retail: Introduction, Difference between a Store/Private, Brand and a National Brand, Growth Drivers of Private Label, Global Scenario of Private Labels, Indian Market Scenario, Advantages of Private Label, Disadvantages of Private Label</td>
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<tr>
<td>Unit IX – Integrated Marketing Communication in Retail: Introduction, Understanding Integrated Marketing Communication, Elements of Communication Process, Communication Plan - Integrated marketing process, Tools of IMC, Upcoming tools of IMC, Factors influencing the increased use of sales promotion</td>
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<td>Unit X – Retail Pricing: Introduction, Establishing Pricing Policies, Factors Influencing Pricing, Pricing Strategies, Psychological pricing, Mark-up and Mark-down Pricing</td>
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<td>Unit XII – International Retailing: Introduction, Stages in Retail Global Evolution, Reasons for Going Global, Benefits of Going Global, Other Opportunities and Benefits of Going Global, Market Entry Methods</td>
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<td>Unit XIII – E-Tailing: Introduction, E-tailing, Role of Technology in Satisfying Market Demand, Technology in Retail Marketing Decisions, Structure and Developments in E-tailing, Factors Influences the Growth of E-Tailing, Advantages and Disadvantages of E-Tailing, Future of Electronic Retailing</td>
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<tr>
<td>Unit XIV – Rural Retailing: Introduction, an Overview of the Indian Rural Market, Role of Rural retailing in India, Challenges in Indian Rural Market, Periodic Markets (Shanties/Haats/Jathras), Rural retail Players in India, Rural Retail Strategies, Future of Rural retailing</td>
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Textbook:
Learning objectives:

- Discuss the scope and managerial importance of market research and its role in the development of marketing strategy
- Have a detailed overview of the stages in the market research process
- Use contemporary statistical packages to calculate and report descriptive statistics from quantitative data
- Interpret data analysis in the context of the identified business problem and communicate research results in an appropriate format

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<tr>
<th>Unit I – Marketing Research Dynamics: Introduction, Meaning of Research, Research Characteristics, Various Types of Research, Marketing Research and its Management, Nature and Scope of Marketing Research, Marketing Research in the 21st Century (Indian Scenario), Marketing Research: Value and Cost of Information</th>
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<tr>
<td>Unit IV – Data Collection Sources and Methods: Introduction, Meaning and Nature of Secondary Data, Advantages of Secondary Data, Drawbacks of Secondary Data, Types of Secondary Data Sources, Primary Data and its Types</td>
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<td>Unit V – Designing a Questionnaire: Introduction, Questionnaire Design, Questionnaire Building, Process of Questionnaire Design, Information Required, Interview Method, Questionnaire Format and Question Composition, Individual Question Content, Questions Order, Form and Layout, Pilot Testing the Questionnaire</td>
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<tr>
<td>Unit VI – Measurement and Scaling Techniques: Introduction, Importance of Measurement and Scaling in Marketing Research, Scales of Measurement: Fundamental Properties, Primary Scales of Measurement, Attitude Measurement Scales, Types of Comparative Scales, Non – Comparative scale, Selecting an Appropriate Scale, Scale Evaluation</td>
</tr>
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</table>
Unit VIII – Hypothesis Testing: Introduction, Hypothesis, Steps Involved in Hypothesis Testing, Test of Significance of a Mean, Test of Significance of Difference between Two Means, Test of Significance of Difference between Two Standard Deviations, Test of Significance of Sample Proportion, Test of Significance of Difference between Two Sample Proportions, Student’s T – Distribution, Parametric and Non-Parametric Tests

Unit IX – Data Processing and Preliminary Data Analysis: Introduction, Survey Field Work and Data Collection, Nature and Scope of Data Preparation, Editing, Coding, Data Entry, Data Cleaning, Preliminary Data Analysis, Assessing for Normality and Outliers

Unit X – Data Analysis I: Introduction, Statistics in Data Analysis, Measures of Central Tendency, Measures of Dispersion, Bivariate Analysis, Multivariate Analysis

Unit XI – Data Analysis II: Introduction, Descriptive Statistics, Univariate Analysis, Bivariate Analysis, Correlation analysis, analysis of variance and analysis of covariance, Multivariate Analysis, Conjoint analysis


Unit XIV – Applications of Marketing Research II: Introduction, Advertising Research, Media research, Sales Analysis and Forecasting, Data Mining

Unit XV – Recent Trends in Marketing Research: Introduction, Marketing Information System and Research, Online Marketing Research, Recent Trends in Marketing Research, Research in Lifestyle Retail, Marketing Research and Social Marketing, Rural Marketing Research, Trends in Services Marketing Research, Brand Equity Research, International Marketing and Branding Research

Textbook:
Business Research Methods, N. Bajpai, Pearson
Reference Book:

HUMAN RESOURCE ELECTIVES

| Course Code- DHRM301 | MANPOWER PLANNING AND SOURCING |

Learning objectives:

- Analyze the theory and concepts of Manpower planning
- Identify the evolution of Manpower planning throughout the organization
- Relate and apply models and methods used in forecasting
- Describe the applications of a human resources information system
- Evaluate the organization's planning program

**Unit I** – Manpower Planning and Resourcing: Factors Affecting Manpower Planning, Need for Manpower Planning, Five Steps in Manpower Planning, Importance of Manpower Planning, Obstacles in Manpower Planning, Advantages of Manpower Planning, Successful Manpower Planning, Consolidated Demand Forecast Development, Effective Decision Making, Gaining Senior Management Support, Meeting the Organization’s Goals and Objectives

**Unit II** – Manpower Forecasting: Introduction, Forecasting, Necessity for forecasting, Steps in forecasting, Demand and supply forecasting, Demand Forecasting techniques, Forecasting accuracy, Benefits of forecasting

**Unit III** – Role of Human Resource in Manpower Planning: Introduction, Inputs provided by HR for manpower planning, Key human resource elements, Requisite Inputs Provided by HR for Orientation and Five Steps of Manpower Planning, Role of Hr in Strategic Workforce Planning, Functions of HR in Manpower Planning for Organisational Success

**Unit IV** – Human Resource Accounting: Introduction, Definition of Human Resource Accounting, Need, Significance, Objectives for HRA, Advantages of HRA, Methods of HRA, Objections to HRA, Controlling Manpower Costs, True Costs of Planning and Recruitment, Human Resource Accounting in India

**Unit V** – Developing a Manpower Plan: Introduction, Developing a Manpower Plan, Qualitative Side of Manpower Planning, Behavioral Event Interviewing, Standard Interviews, Competency Mapping (Skill Inventory), Problems in Manpower Planning, Sample Manpower Plan, Running Enterprises With No Major Expansion Plan, Running Enterprises with Major Expansion Plans for Expansion, Modernisation, Diversification etc., Challenges of Manpower Planning Formulation Related to Old and New Enterprise

**Unit VI** – Sourcing & Recruitment: Introduction, Sources of candidates, Recruitment, Outsourcing, Attracting candidates, E-Recruitment, Person specifications


**Unit VIII** – Selection Tests: Introduction, Selection Process, Selection Methods, Psychological tests, Types of tests, Validity of tests, interpreting test results, Psychometric tests, online test, Importance of tests, Interview and Its Types, Interview Process and Interview Questions, Final stages

**Unit IX** – Induction: Introduction, Benefits of an Induction program, designing an induction program, Documentation, Types of Induction, On-the-Job Training, Induction Checklist, Essential Elements, Sample of Good Induction, Induction Process- Steps, Stages and
### Induction Programme

**Unit X – Talent Development:** Introduction, Policies and approaches, Organizational Training, Role of Training Managers, Essential Skills, Benefits and Tips to be an Effective Training Manager, Job Analysis, Job Description and Job Specification, Skills Analysis, Skill Inventory and It’s Approaches, Performance Appraisals and Its Types, Manpower Inventory including Quantitative and Qualitative Aspects, Quantitative Determination of Human Resource Requirements- Work Study


**Unit XII – Career Management:** Introduction, Career management process, Career dynamics, Career management policies, Career planning process, Tips for successful career planning, Talent management, Succession planning, Career Management Model and Addressing Challenges

**Unit XIII – Employee Turnover:** Introduction, Employee turnover – causes and remedies, Cost of employee turnover, Importance of employee turnover, Employee exit process (Managing organizational release, Types and Factors Affecting Employee Turnover, Introduction to Employee Retention and Its Cost to Organisation, Employee Retention- Its Pros and Cons, Meaning of Retention Rate and Various Strategies to Retain Employees, Key Drivers of Employee Retention

**Unit XIV – Train to Hire:** Introduction, Outsourcing the Train-to-Hire Process, Partnering with educational institutions, Generating revenue, Step in Developing a Training and Hiring Plan, Train and Hire - Model and Sources, setting up an academy, Designing Curriculum

**Unit XV – Recent Trends in Manpower Development and Planning:** Introduction, Competency mapping, Knowledge management, E-Manpower Development, E-Manpower planning, Ways to Adopt Emerging Trends and Overcome Challenges, Job Clarity, Job Enrichment and Job Enlargement, Recent Trends in Organisation Structuring

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**Textbook:**
Manpower Planning & Sourcing, Dr. Sujit Kumar Acharya & Prof. Santosh Kumar Tripathy, Himalaya Publishing House

**Reference Book:**
Manpower Planning & Sourcing, D K Sharma, Centrum Press

**Course Code- DHRM302**  
**MANAGEMENT AND ORGANIZATIONAL DEVELOPMENT**

**Learning objectives:**
- To understand the nature of change, the forces for change, resistance to change and approaches to managing organizational change
To understand the nature and concept of organizational transformation and transition

To gain an insight into the organizational development programmes and techniques, emerging OD approaches and techniques and its application in organizations

To be aware of implications of change tailoring the specific needs of the organization through organizational development techniques

Unit I – Organizational Development: An introduction: Organizational Development – Meaning and Definition, History of OD, Relevance of Organizational Development for Managers, Characteristics of OD, Assumptions of OD

Unit II – Change Process and Models: Organizational Change, Strategies for Change, Theories of Planned Change (Lewin’s change model, Action research model, the positive model), Action Research as a Process, Resistance to Change

Unit III – Role of OD Practitioner: OD Practitioner, Role of OD Professional in Organizations, Competencies Required for an OD Professional, Scope of the Role of an OD Professional

Unit IV – Process of OD: Process of OD, Components of OD program, OD program phases, Making an Entry, Developing Contract, Launch, Situational Evaluation, Closure

Unit V – Designing Interventions: OD Interventions, Characteristics of OD Interventions, Levels of Diagnosis in Organisations, OD Map, Factors Affecting Success of Interventions

Unit VI – Values and Ethics in OD: Professional Values, Value Conflict and Dilemma, OD Values and Changing Themes over Time, Ethics in OD, Ethical Dilemmas in Practicing OD, Factors that Influence Ethical Judgement

Unit VII – Human Process Interventions: Introduction, Team Development Interventions, Interpersonal Development Interventions


Unit IX – Structural Interventions: Socio-Technical Systems, Techno-Structural Interventions, Physical Settings and OD, Types of Techno-Structural Interventions

Unit X – Strategic Interventions: Integrated Strategic Change, Trans-organisation Development, Merger and Acquisition Integration, Culture Change, Self-Designing Organisations, Organisation Learning and Knowledge Management, Confrontation Meetings, System 4 Management, Learning Organisations

Unit XI – Technology and OD: Technology & OD: Basic Concept, Impact of Technology in Organisations, Benefits of Using Technology in OD, Guidelines for Integrating Technology in OD Interventions, Tools used in OD

Unit XII – Issues Faced in OD: Introduction, Issues Related to Client Relationships, Power, Politics and Organisational Development

Unit XIV – Organisational Learning: Learning Organisation, Senge’s Approach Nonaka & Takeuchi’s Approach, Executive View on Organisational Learning, Reality Checklist, Seven Steps of Initiating Organisational Learning

Unit XV – Future of OD: Organisational Development and Globalization, Emerging Trends in OD, Expanding the use of OD, Combining traditional “hard” business competencies and OD, Creating whole system change, Using OD to facilitate partnerships and alliances, Enhancing constant learning, Trends within the Organisation

Textbook:
Management & Organizational Development, Ratan Raina, SAGE

Reference Book:
Organizational Change & Development, Dipak Kumar Bhattacharyya, Oxford University Press

Course Code- DHRM303 | EMPLOYEE RELATIONS MANAGEMENT

Learning objectives:
- Describe and critique the concept of employee engagement
- Identify problems associated with both over-engagement and disengagement
- Examine the extent to which emotional and aesthetic labour are positioned in some contemporary organizations
- Critically evaluate the measurement of employee engagement
- Identify the issues associated with employee engagement in times of organisational change, including the role of effective communications during organisational change.

Unit I – Introduction to Employee Relations Management (ERM): Introduction, Overview of Employee Relations Management, Importance of Employee Relations Management, Employee Relations Management Tool, Core Issues of Employee Relations Management

Unit II – Strategic Employee Relations Management: Introduction, Different Strategy Levels in an Organisation, Strategy and Employment Policies, Future Challenges, Performance Management Services, Quality, Involvement and Commitment as Competitive Advantages, the Psychological Contract: Interest and Expectations, HR Infrastructure, Employee Surveys

Unit III – Organizational Aspects in Employee Relations Management: Introduction, Organisational Commitment and Engagement, How Organisations Work, Organisational Culture, Conflicts in Organisations

Unit IV – Behavioural Aspects in Employee Relations Management: Introduction, Motivation, Leadership, Communication, Decision Making, Power and Authority

Unit VI – Organizational Discipline: Introduction, Overview of Organisational Discipline, Types of Organisational Discipline, Types of Disciplinary Problems, Disciplinary Procedure

Unit VII – Grievance Handling: Introduction, Grievance, Needs for Grievance Redressal, Steps in Grievance Redressal Procedure, Essential Pre-requisites of Grievance Procedure, Grievance Interview, Precautions in Grievance Handling, Conflict Resolution

Unit VIII – Industrial Relations: Introduction, Overview of Industrial Relations, Composition of Industrial Relations, Importance of Industrial Relations, Perspectives of Industrial Relations

Unit IX – Trade Unions: Introduction, Trade Unions, Reasons for Joining Trade Unions, Functions of Trade Unions, Types of Trade Unions, Advantages and disadvantages of Trade unions, Trade Unions in India


Unit XI – Laws related to Employee Relations: Introduction, Evolution of Employee Laws in India, Laws Relevant to Employee Relations, Laws Relevant to Organisational Conflicts, Laws Relevant to Employee Wages and Compensation

Unit XII – Participation and Empowerment: Introduction, Employee Participation and Empowerment Objectives, Employee Participation, Advantages of Employee Participation, Employee Participation in India, Methods of Participation, Employee Empowerment

Unit XIII – Employee Rewards: Introduction, Employee Rewards, Formulating Employee Rewards, Types of Reward system, Recognition programs


Unit XV – Contemporary Issues in Employee Relations: Introduction, Careerism, Stress and Employee wellness in organisation, Organisational Justice, Organisational Misconduct, Issues with Contract labour and temporary workforce, Managing Employee Relations through Organisational Change, Employee relations for the diverse workforce and Multinational Companies (MNC), Employee relations during crises – Recession

Textbook:
   Employee Relations Management, D P Sahoo, SAGE

Reference Book:
   Employee Relations Management, Singh and Kumar, Pearson
Learning objectives:

- Understand the concept, evolution and the Purposes of HR Audit
- Identify the scope and areas of Human Resource Audit
- Learn how to become prepared and how to perform periodic and formal organizational assessments and reviews with knowledge and confidence
- Learn about the steps that HR Professional should follow in managing the Human Resource Audit process.
- Demonstrate awareness about the different approaches and models in carrying out the Human Resource Audit


Unit IV – HR Audit Methodology and Issues: Introduction, Conducting a Human Resource Audit, Preliminary Steps, Goals of the Audit, Areas of the Audit, Issues in HR Audit

Unit V – Human Resources Audit Structure: Introduction, Recruiting, Staffing, Employee Orientation Programmes, Employee and Supervisory Training, Benefit Administration

Unit VI – HR Audit and Workforce Issues: Introduction, Workforce Communication and Employee Relations, Performance Management, Compensation System, Teambuilding System

Unit VII – Areas for HR Audit: Introduction, Audit of HR Planning, Audit of HR Development, Audit of Training, Audit of Industrial Relations, Audit of Managerial Compliance, Audit of HR Climate, Audit of Corporate Strategies


Unit IX – Audit and HR Scorecard: Introduction, How to Approach a Human Resource

**Unit X** – Audit and Competency Management: Introduction, Competency Management – Introduction, Competency Management Framework, Design and implementation, Competency Mapping, Integration of Competency Based HR systems


**Unit XII** – HR Audit as Intervention: Introduction, Effectiveness of Human Resource Development Audit as an Intervention, Human Resource Audit and Business Linkages


**Unit XIV** – HRD Audit: The Indian Experience and case studies: Introduction, Prevalence of HR Audit, HR Audit Case-Manufacturing Industry, HR Audit Case-Service Industry

**Unit XV** – HR Audit Questionnaire: Introduction, Areas to be Concentrated, A Comprehensive Coverage of the Entire Human Resource Practices, A Sample Internal Human Resource Audit Questionnaire

**Textbook:**
HR Audit, T V Rao, SAGE

**Reference Book:**
HR Audit, Durdana Ovais Rajni Gyanchandani, Everest Publishing House

1. Analytics and Data Science

<table>
<thead>
<tr>
<th>Course Code - DADS301</th>
<th>Programming in Data Science</th>
</tr>
</thead>
</table>

**Learning objectives:**
- Create Complex R Programs using Loops
- Plot Data and Create Informative Visualizations
- Perform Basic Descriptive Analytics using R
- Fit Regression Model in the Data

**Unit 1** – Introduction to R: Installation of R, Installation of R Studio, setting up R Work environment, Importing files in R

**Unit II** – Data Types and Data Structures in R: Data Types in R, Data Structures in R, Defining Vectors

**Unit III** – Basic Operations using R: Basic Mathematical Operations using R, working with different mathematical operators, Vector Operations using R

Unit V– File Management using R: Data Import Using R, Data Export Using R, Working with Data of Different Formats

Unit VI– Conditional Statements: If condition, If-Else Condition, Writing Complex Conditional statements in R

Unit VII– Loop Structures: Writing Loops in R Program, Writing complex loop structures using R Enhancing Effectiveness of R programs using complex loops

Unit VIII– Functions: Defining Functions in R, Using functions to shorten R Code, Effective coding using functions

Unit IX– Algorithms: Permutation and Combination, Mathematical Series, Fibonacci Series

Unit X – Complexity: Random Number Generation, Simulation Study, Profiling

Unit XI – Plotting using R: Creation of Simple Plots, Line Plots, Scatter Plots

Unit XII – Advanced Plotting using R: Using GGPlot Libraries, Creation of Complex Plots using GGPlot libraries


Unit XIV– Regression Analysis using R: Calculating Correlation, Fitting Linear Regression Models

Unit XV– Case Study: Case Study involving Correlation and Linear Regression Model

Reference Book

ANALYTICS AND DATA SCIENCE ELECTIVES

<table>
<thead>
<tr>
<th>Course Code- DADS302</th>
<th>Exploratory Data Analysis</th>
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Learning objectives:
- Describe application of Data Science in Different Domains
- Remove Missing Values from the data
- Detect Outliers from the data
- Perform Principal Component Analysis in the Data

<table>
<thead>
<tr>
<th>Unit I</th>
<th>Introduction to Data Science: What is Data Science, Role of Data Science in Industry, Different Phases of Analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit II</td>
<td>Application of Data Science in Different Domains: How Data Science is used in different domain, Use of Data Science in Banking, Use of Data Science in Health Care, Use of Data Science in Logistics, Use of Data Science in Marketing</td>
</tr>
<tr>
<td>Unit III</td>
<td>Different Types of Data: Primary and Secondary Data, Data in different forms</td>
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<tr>
<td>Unit IV</td>
<td>Introduction to Data Analysis: Overview of Descriptive Analysis, Overview of Exploratory Analysis, Overview of Predictive Analytics</td>
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<tr>
<td>Unit V</td>
<td>Descriptive Analysis: Measures of Central Tendency, Measures of Dispersion</td>
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<tr>
<td>Unit VI</td>
<td>Exploratory Analysis: Visualizing the Data, Making Different Plots</td>
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<td>Unit VII</td>
<td>Predictive Analysis: Regression Line Fitting, Overview of Forecasting</td>
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<td>Unit VIII</td>
<td>Inferential Analysis: Hypothesis Testing, Different Parametric and Non-parametric Tests</td>
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<td>Unit IX</td>
<td>Missing Value Treatment: What is Missing Value, Imputation Techniques</td>
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<td>Unit X</td>
<td>Outlier Detection: What is Outlier, Outlier Detection, Removal of Outliers</td>
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<tr>
<td>Unit XI</td>
<td>Data Transformation: Why Transformation of Data Needed, Data Standardization, Different Transformation Techniques</td>
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<tr>
<td>Unit XII</td>
<td>Working with High Dimensional Data: What is High Dimensional Data, Different Techniques to work with High Dimensional Data</td>
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<tr>
<td>Unit XIII</td>
<td>Principal Component Analysis: What is PCA, How PCA is performed, Performing PCA in R</td>
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<tr>
<td>Unit XIV</td>
<td>Factor Analysis: What is Factor Analysis, How Factor Analysis is performed, Performing Factor Analysis in R</td>
</tr>
<tr>
<td>Unit XV</td>
<td>Case Study: Case Study involving Exploratory Data Analysis</td>
</tr>
</tbody>
</table>

Reference Book
2. Statistics for Management and Economics by Gerald Keller, Cengage Learning
3. Sampling Techniques by William G Cochran, Wiley and Sons
4. Bayesian Methods for Management and Business by Eugene D. Hahn, Wiley
Course Code- DADS303 Introduction to Machine Learning

Learning objectives:
- Describe the difference between Supervised and Unsupervised Learning
- Perform Different Classification Techniques for Prediction
- Perform Clustering for Data Segmentation
- Build algorithm for Market Basket Analysis


Unit II – Supervised and Unsupervised Learning: What is Supervised Learning? What is Unsupervised Learning?

Unit III– Regression: Regression as a method in Supervised Learning, Linear and Logistic Regression, Performing Regression using R

Unit IV– Decision Trees: Classification using Decision Tree, Performing Decision Tree using R

Unit V– Random Forest: Classification using Random Forest, Performing Random Forest Classification using R

Unit VI– Nearest Neighbours: What is K-NN Classification, Performing K-NN Classification using R

Unit VII– Naïve Bayes: What is Naïve Bayes Classification, Performing Naïve Bayes

Unit VIII– Ensemble Techniques: What is Ensemble Technique? Implementing Ensemble Techniques using R

Unit IX– Validation Measures: Different Model Validation Measures, Calculating Different Validation Measures using R

Unit X– Introduction to Clustering: What is Unsupervised Learning, What is Clustering, Different Clustering Techniques


Unit XII– Hierarchical Clustering: What is Hierarchical Clustering, Performing Hierarchical Clustering using R


Unit XIV– Market Basket Analysis: Basic Apriori Algorithm, Market Basket Analysis using R

Unit XV– Case Study: Case Study involving Classification and Clustering using R

Reference Book
1. Machine Learning with R Edition 2, Brett Lantz
2. Data Mining and Business Analytics with R
3. The Analysis of Time Series – an Introduction by Chris Chatfield, Chapman & Hall/CRC
4. Time Series Analysis: Forecast and Control by Box and Jenkins

<table>
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<tr>
<th>Course Code- DADS304</th>
<th>Visualization</th>
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<tbody>
<tr>
<td></td>
<td><strong>Learning objectives:</strong></td>
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<tr>
<td></td>
<td>• Create some stunning visualizations using R-Shiny</td>
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<td></td>
<td>• Design R-Shiny Dashboard</td>
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<td></td>
<td>• Visualize Data using Tableau</td>
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<td></td>
<td>• Tell Stories about the data using Tableau</td>
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</table>

| Unit I – Introduction to Data Visualization: What is Data Visualization, Why Visualization is important in Business Analytics |
| Unit II – Basic Visualization using R: Plotting using R, Creating Advanced Plots using R |
| Unit IV– Introduction to R-Shiny: What is R-Shiny, Creating Basic R-Shiny App |
| Unit V– Dashboard Design using R-Shiny: Creation of R-Shiny Dashboard, Adding features in R-Shiny Dashboard |
| Unit VI– Creating Advanced Dashboard and Visualization: Creation of advanced Interactive R-Shiny Dashboard, Addition of Advanced Visualizations in R-Shiny Dashboard |
| Unit VII– Introduction to Tableau: Working with Tableau, Understanding Different Features in Tableau |
| Unit VIII– Data Management using Tableau, Importing Data into Tableau, Importing Excel Data Importing Other formats Data |
| Unit IX – Creating Basic Plots using Tableau, Creating Different Plots in Tableau, Creating Advanced Plots in Tableau |
| Unit X – Using Filtering Options: Filtering in Tableau, Using Different Filtering Options to create Meaningful graphs |
| Unit XI – New Variable Creation: Creating New Variables, Using New Variables to create meaningful visualizations |
| Unit XII – Dashboard Creation using Tableau: Dashboard Creating in Tableau, Different Elements in Tableau Dashboard, Creating Dynamic Dashboard in Tableau |
| Unit XIII – Story-telling using Tableau: Creating Stories using Tableau, Adding Different Tools to enhance stories |
| Unit XIV – Basic Analytics using Tableau: Basic Analytics in Tableau, Clustering, Linear Model Fitting |
| Unit XV – Case Study: RShiny App Creation, Tableau Interactive Dashboard Creation |
Reference Book


2. Retail Management

<table>
<thead>
<tr>
<th>Course Code- DRMM301</th>
<th>Enterprise Resource Planning (ERP)</th>
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</table>

**Learning objectives:**
- Explain the central role ERP in retail, and the impact of key market/retail trends upon this sector in the local and global contexts.
- Understand and apply appropriate frameworks to develop high level retail marketing strategy, and identify the role of ERP in the building of brand equity and shareholder value in the retail industry.
- Evaluate the implementation of marketing strategy through the retail mix – including product and merchandise mix, pricing, location, and store- design, promotions, and store management - to improve the total customer experience and retailer market competitiveness.

**Unit 1** - ERP in Retail: Overview of ERP software solutions- small, medium and large enterprise vendor solutions, BPR, and best business practices: Evolution of ERP, early and new ERP packages, overview of ERP packages, ERP products and markets, players and characteristics, benefits of ERP implementations, critical success factors, pitfalls.

**Unit 2** - ERP and Related Technologies: Business process Management, Functional module, information systems for supply chain management

**Unit 3** - Data Warehousing: Concept, Need, Factors affecting data warehousing, Application

**Unit 4** - Data Mining: Enterprise Resource Planning (ERP), Knowledge Management, Data Warehousing, Data Mining, Customers Relationship Management applications

**Unit 5** - Management Information System: Significance, Need, Factors affecting use of information, Applications of information system

**Unit 6** - Product Life Cycle: Definition, Need, Strategies for PLC, Types of PLC


**Unit 8** - ERP Modules Structure: e-tailing, Emerging retail technology and retail IT products and vendors

**Unit 9** - ERP-Manufacturing Perspective: Need, Significance, key elements in manufacturing
Unit 10 - ERP-Sales and Distribution Perspective: Definition, Need, ERP in sales and distribution, Optimisation of Supply Chain, Organisation Design

Unit 11 - ERP-Inventory Management Perspective: Definition, Need, ERP in inventory management, Application of ERP, JIT and Quality Management

Unit 12 - ERP-CRM Perspective: Definition, Need, ERP in customer management

Unit 13 - ERP-HR Perspective: Definition, Need, Use of ERP in human resource management

Unit 14 - ERP-Finance Perspective: Definition, Need, Use of ERP in financial management, Measures of financial performance

Unit 15 - Future Directions in ERP: E-Business, E-Business Expectations and Customer Satisfaction

Reference Book
1. G. Raguram and N. Rangaraj, Logistics and supply chain management-Manikam, New Delhi – 2005
2. J . David Viale, Basic of management: From Ware House Viva books, New Delhi, 2004
4. Arturqa Thompson AJ. Strkkland, John .E.GAMBLE and Arun. K.Jain, Crafting and executing strategy; The quest for competitive advantage, New Delhi, 2005

RETAIL MANAGEMENT ELECTIVES.

| Course Code- DRMM302 | Retail Customer Relationship Management |

Learning objectives:
- Understand and describe a customer relationship management application,
- Understand how it has been successfully implemented in various organizations and what does it take to ensure a successful implementation
- Develop understanding about customer relationship management concepts and frameworks, and how these are applied to form relationships with customers and other internal and external stakeholders.
- Develop skills to analyse and synthesise information and issues, related to customer relationship management, from retail perspectives.

Unit 1 - Global retail Environment: Retail operations globally, Retail houses at global level, Challenges and directions ahead

Unit 2 - Leadership and Organizational Behaviour: Global leaders in retail, managing a global chain,
Retail institutions by ownership

**Unit 3**- Design and Management of Information Systems: Information gathering and processing in retail, Design of brick and mortar and click and mortar retail stores

**Unit 4**- Category Management: Need, Significance, and importance of category management

**Unit 5**- Digital and Social Media Marketing: Web and non-store-based retail outlets, Importance and significance

**Unit 6**- Consumer Behavior: Definition, Models of Consumer behaviour, Importance of behavioural studies, Importance of the study of consumer Behavior; Determinants of Consumer Behaviour; Consumer and marketing strategy; The new age consumer.

**Unit 7**- Integrated Marketing Communication: Definition, Need, Importance and IMC Case studies

**Unit 8**- Retail Franchising: Franchising Need and Importance, channel relationships in franchising

**Unit 9**- Concept of Brand: Need, Importance, Brand Equity and building brand loyalty

**Unit 10**- Growing and Sustaining Brand Equity: Brand Equity measures, Importance and Significance

**Unit 11**- Branding in Retail Business: Local and Global brands and importance the retailer as a Brand - The role of own label - Retailers perspective towards Manufactures and their Brands - Emerging trends in Branding of Retail Business.

**Unit 12**- Services Marketing: Concept of customer service and its significance in retail, Framework for understanding gaps in customer service, concept of CRM and service blueprinting

**Unit 13**- Services Product Management: Role of Product management in retail services

**Unit 14**- Services Distribution Strategies: Concept of distribution management, Marketing channel systems – Concepts, participants, environment, behavioural process – Developing the marketing channel-Strategy, design, channel platform- challenges, Integration of distribution channels

**Unit 15**- Services Quality Management: Distinctive characteristics service operations-Service Bench Marking-Service strategy - Designing the service enterprise – Service Quality-Service facility location-Managing service operations-Service-Supply relationships vehicle routing.

**Reference Book**

1. Retailing Management Text & Cases- Swapna Pradhan- The McGraw Hill Companies
2. Retailing Management - Levy & Weitz- The McGraw Hill Companies
3. Marketing Channel- Bert Rosenbloom- South Western -Thomson
5. Retail Management A Strategic Approach – Barry Berman & Joel R.Evans- The Prentice Hall of India, New Delhi
Learning objectives:
- Understand the functions of retail business and various retail formats and retail channels.
- Understand the difference between Retail and Manufacturing Supply Chain.
- Understand, key drivers of retail supply chain and how to select a retail store location.
- Analyze Retail Market, Branding and local competitive analysis.
- Develop the ability to undertake store management and facility management.

Unit 1: Introduction to Production and Operation Management: Meaning, significance and scope; History of OM, applications of OM.

Unit 2- Production Planning and Control: Need, Significance, Measures of Planning and control.

Unit 3-Material Management: Type, role, 5Rs of material management.

Unit 4-Sourcing and Merchandising Management: Definition, sources, process of sourcing Merchandise Planning, Buying and Handling, Merchandise Pricing, Retail Communication Mix, Promotional Strategy.

Unit 5-Visual Merchandising and Pricing: Types, goals and elements of visual merchandising, Merchandise Presentation Strategies, Colour blocking, other techniques of merchandise placement, Physical materials used to support the display, Components of display, Some Useful Display Fixtures, Shelves, Gondolas, Round racks, four ways, Saccades and fixation, Replenishes, Plano gramming.

Unit 6-Brand and Private Label Management: Concept of Brand - Brand functions - Brand Loyalty and Equity - Brand Stretching and Extensions - Strategic Brand Management Process - Identifying and establishing brand positioning and values - Planning and implementing Brand Marketing Programs - Measuring and interpreting Brand performance, Concept of Private labels, Contemporary issues related to brand management.

Unit 7-Retail Branding and Local Competition: Concepts of retail branding, local influences on branding.

Unit 8-Retail Brand Equity and Store Accessibility: Brand Equity concepts, store management, Growing and sustaining Brand equity - Criteria for choosing Branding elements to build Brand equity - Marketing Programs to build Brand equity - Developing Brand Equity measurement and Management system.

Unit 9-Franchising in Retail: Development of retail franchising in India and abroad - Franchising strategy - Retailing and Vertical Marketing Systems-Models of franchising Role of franchisees in market, evolution retail franchisees.

Unit 10-Lifestyle and Fashion Retailing: Retailing in fashion: concepts and lifestyle retailing.

Unit 11-Luxury Marketing: What is luxury, Luxury marketing mix, Global outlook, European luxury market, Emerging luxury markets, what are the specifications.
Unit 12-Food Retailing: Basic concepts and emergence of changes in food retail, Retail merchandising, merchandise selection and planning, range planning, category management; retail pricing: strategies and techniques with special reference to food retailing

Unit 13-Store Management and Layout: Store atmospherics and management, the Merchandise Mix: Introduction, Objectives, Concept of Merchandise Mix, Merchandise line, The Assortment of Products, Assortment strategy, Merchandise Mix of Show Off, Role of a merchandiser, Other Atmospherics in Merchandising, Colour scheme, Lighting


Unit 15-Store Audit and Stock Management: Concept of SKU’s and their management Stock management: stock check, negative stock, stock quality, returns and defective goods, gap check, product line management. Receiving stock –prioritizing plan programming- End cap display.

Reference Book
1. Operations Research – Kanti Swarup, Gupta and Man Mohan

Course Code- DRMM304

IT in Retail

Learning objectives:
- Describe the overall change in the structure of the retail industry over the past 60 years
- Discuss the role information systems have played in the changing retail industry
- Understand the application of IT in major retail functions
- Analyse the principle of international business and strategies adopted by firms to expand globally
- Integrate concept in international retail business with tools of Information Technology

Unit 1-E Commerce and Applications: Concept of E commerce, E-Commerce applications: Consumer Applications, Organisation Applications, Procurement - Online Marketing and
Unit 2 - E Business and Applications: Concept of E business, Applications in various sectors


Unit 5 - Electronic Payment Systems: Electronic Payment Systems: Introduction to payment systems, On-line payment systems-Prepaid E - payment systems, Post - paid E-payment systems, E-Cash or Digital Cash, E-Cheques, Credit cards. Smart cards, Debit cards

Unit 6 - Design and Management of Information Systems: Logistic and supply chain management: Leveraging mathematical and analytical models – Logistics infrastructure in India and its implication for supply chain management – Plant location – Distribution network design – Distribution channel section

Unit 7 - Foundations in Data Science: Introduction to AI and problem solving


Unit 9 - BPR and Benchmarking: Business Process Reengineering (BPR) concepts: emergence of reengineering, business process, rethinking of processes, identification of reengineering, need, preparing for reengineering; Implementing change, change management, integrating with other systems, Post ERP implementation.

Unit 10 - RFID: Transforming Technology: RFID technology: Role and importance, Future of RFID

Unit 11 - Concept of Retail Banking: Distinction between Retail and Corporate/Wholesale Banking; Retail Products Overview: Customer requirements, products development process, Liabilities and Assets Products, Approval process for retail loans, credit scoring

Unit 12 - Important Retail Assets Products: Information Technology and Logistics: Electronic Data Interchange, Personal Computers Artificial Intelligence/Expert system, Communications Bar coding and Scanning, Electronic Data Interchange standards, Communication, Information and Future directions

Unit 13 - Retail strategies for Banking: Tie-up with institutions for retail loans; Delivery Channels-Branch, Extension counters, ATMs, POS, Internet Banking, M-Banking; Selling process in retail products; Customer Relationship Management-Role and impact of customer relationship
management, stages in CRM process; Technology for retail banking

**Unit 14** - Growth of E Banking: New products like insurance, Demat services, online/phone banking, property services, investment advisory/wealth management, Reverse Mortgage - Growth of e-banking, Cross selling opportunities


**Reference Book**
1. Information Technology for Business, Antony Thomas, Pratibha Publications

**BANKING, FINANCIAL SERVICES & INSURANCE ELECTIVES**

<table>
<thead>
<tr>
<th>Course Code- DBFI301</th>
<th>Bank Management &amp; financial risk management</th>
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**Learning objectives:**
- Describe the Basic of Banking, their types and functioning of commercial banking.
- To understand the basic concept of Investment, Lending and liquidity management and credit evaluation process.
- Recognise the key risks faced by a bank and assess what the bank is doing to measure, monitor and mitigate these risks.
- Understand the approach to risk management through risk identification, risk measurement and risk management (or mitigation)

**Unit 1**: Bank: Introduction to Bank Management, Basic Concept, Types of Banks, Role of Banks.


**Unit 3**: Banking Products: Classification of banking products based on Assets and Liabilities.

**Unit 4**: Banking Management: Concept, Basic banking operations of commercial banks in India.

**Unit 5**: Financial System and Economic Development Interrelationship between financial system &
economic development, Interest rate components & dynamics.

**Unit 6:** Evaluating Bank Performance and Managing Cost of Funds and Liquidity in banks. Operation and performance of commercial banks.

**Unit 7:** Understanding Bank financial statements. DuPont model for evaluating bank performance. Basic risk and return features of commercial banks. Overall liquidity analysis. Estimating marginal cost of funds for pricing assets and taking investment decisions.

**Unit 8:** Legal reserve requirements and manage cash assets. A model to estimate liquidity needs and plan for temporary cash deficiencies and longer-term liquidity needs.

**Unit 9:** Credit and NPA Management. Basic credit analysis principles and the characteristics of different types of loans. Procedure for estimating a business borrower’s cash flow from operations. Basic credit scoring models applied to individual borrowers. Interpreting financial statements and generating cash flow estimates to determine repayment prospects. Customer profitability analysis: the basic framework used to assess whether a bank is profiting from a customer’s total relationship. NPA regulations governing banks and NPA management.

**Unit 10:** Risks in Banking: Trade-offs involved in balancing credit risk, liquidity risk, interest rate risk, market risk, operational risk etc. Pricing of securities, total return analysis to investors and the determinants of interest rates. GAP analysis and the use of sensitivity analysis to assess the potential impact of interest rate and balance sheet changes on net interest income. Regulatory capital requirements under Basel III norms.

**Unit 11:** Foundations of Risk Management: An understanding of corporate risk governance and the trade-off between risk and return, The construction of efficient portfolios, Fundamental asset pricing models, Enterprise risk management frameworks, Data quality management, A review of major financial disasters.

**Unit 12:** Basic probability concept and statistics, regression and time series analysis, and various quantitative techniques useful in risk management such as: Monte Carlo methods, Volatility forecasting models, Value-at-Risk estimation.

**Unit 13:** Valuation and Risk Models: Basic bond valuation and bond hedging, Valuation using binomial trees, An understanding of the Black-Scholes-Merton model, Value-at-Risk (VaR), Expected and unexpected loss estimation, Stress testing.

**Unit 14:** Market risk measurement and management techniques. These include: Fixed-income interest rate sensitivities, Volatility exposures, Value-at-Risk (VaR) and back testing VaR, Expected shortfall (ES), Correlations and copulas, Parametric and non-parametric estimation methods.

**Unit 15:** Operational and Integrated Risk Management: Coverage of the tools and techniques necessary to measure, manage, and mitigate operational risk, Economic capital allocation, Enterprise risk management (ERM), Knowledge of critical issues related to liquidity risk management, model risk, loss data modelling and IT infrastructure, stress testing, and risk appetite.

**Reference Book**

learning.

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<th>Course Code- DBFI302</th>
<th>FINANCIAL STATEMENT ANALYSIS &amp; BUSINESS VALUATION</th>
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Learning objectives:
- Understanding the concept of Financial Statement analysis and role of IAS and IFRS.
- Analysing Financial statements by calculating and interpreting Liquidity, Profitability, Activity and Leverage ratios and conducting Do Pont Analysis for Business organizations.
- Preparing and interpreting Fund Flow and Cash flow statements of business entities and explaining their significance for management of funds.
- Understanding Business Valuation Basics, Principles and techniques of valuation and relevant techniques.

Unit 1: Concept of Regulation of financial statements, Role of the International Accounting Standards Committee Foundation, Various International Accounting Standards (IAS) and International Financial Reporting standards (IFRS).

Unit 2: The concept of fair presentation, financial statements: Income statement, Statement of comprehensive income, Statement of financial position.

Unit 3: Financial Modelling for Project Appraisal, Use of Functions like Net Present Value (NPV), Internal Rate of Return (IRR), etc., Forecasting techniques.


Unit 6: The Comparative analysis of the Balance Sheet and Income Statement (Common size analysis; trend analysis), Year to year, peer to peer and industry to company.

Unit 8: The Analysis of Profitability, Du Point Analysis, Cutting to the Core of Operations (the analysis of profitability), Distinguishing financing and operating activities and the effect of leverage, Drivers of operating profitability, Profit margin drivers; turnover drivers; borrowing cost drivers


Unit 11: Business Valuation Basics, Principles and techniques of valuation – DCF, Multiple methods, accounting based valuation, Asset Valuation; Earning Valuation; Cash flow valuation; Other valuation basis.

Unit 12: Valuation in Mergers and Acquisitions, Assets and Cash Flows – strengths and weaknesses of various valuation method, Recognition of interest of various stakeholders, Selection of appropriate cost of capital for valuation, Synergistic benefits, Forms of Consideration and terms of acquisitions.


Unit 14: Fair Value in Accounting Measurement, Concept, Measurement techniques and standards, Challenges, Accounting treatment.

Unit 15: Valuation of Intangibles, Intellectual Property, Intangibles, Brand Valuation

Reference Book

2. Dr. John Robertson - Financial ratio analysis - John Robertson publishers

Course Code- DBFI303

PRINCIPLES & PRACTICES OF INSURANCE

Learning objectives:

1. Provide an understanding of the economic and legal principles Insurance.
2. Explain insurance operation, including functions of insurance, insurance markets, insurance regulations and the use of insurance as a tool to avoid losses and reduce risk.

3. Acquaint themselves with major insurance products, such as life insurance, general and health Insurance.

4. Develop an analytical approach to the application of knowledge and skills to solve problems related to insurance claims settlement and for valuation purpose.


UNIT-II Evolution And History Of Insurance: Introduction and history of Insurance, Growth and development of Insurance in India, Concept of Pooling in Insurance, Different Classes of Insurance, Importance of Insurance, Unexpected Eventualities


UNIT-V Insurance Contract: Understanding Insurance Contract, Essential Elements of Insurance contract and explanation of various terms associated with the contract


UNIT-VII Insurance Customers: Understanding Insurance Customers, understanding different customer needs and their mindsets, Understanding customer behaviour at purchase point and customer behaviour when claim occurs.

UNIT-VIII Insurance Market: Constituents of Insurance Market, Operations of Insurance Companies, Operations of Intermediaries, Specialist Insurance Companies

UNIT-IX Insurance Laws And Regulation: The Insurance Act, 1938 -Its features, Process of registration of Insurance companies, Duties and responsibilities of Insurer, Power & function of the Controller of Insurance,


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<tr>
<th>Course Code- DBFI304</th>
<th>Financial Services</th>
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Learning objectives:
- Understand and describe the nature and importance of financial services and its role in economic development.
- Analyze the importance and functions intermediating institute like merchant banks and credit rating in helping the business organization and investors to meet their objectives and make the right decisions.
- Describe the various services provided by the different institutions and analyze the features of different instrument so that the organization as well as the investors can decide the appropriate instrument for them.
- Acquire the skills necessary to participate in managing a financial service company.


UNIT-XIV Premium Payment, Lapse And Renewal: Premium, Surrender Values, Non- Forfeiture Options, Revival; Assignment Nomination Loans – Surrenders – Foreclosure: Assignment, Nomination, Loan and Surrenders, Foreclosure.

UNIT-XV Policy Claims: Methods of maturity claims and death claims, survival benefits, Accident benefit claim options, settlement options, valuation and surplus.

Reference Book
- Elements of Insurance – Dr. A. Murthy, Margham Publications.
Unit VI: Securitization: Concept, Need of Securitization, Features, Securitization process, Limitations

Unit VII: Portfolio Management Services: Concept, Function, Strategies

Unit VIII: Consumer Finance: Concept, Types of Consumer Finance, Demand for Consumer, Finance- Factors

Unit IX: Venture Capital: Concept & Rational, Methods of Evaluation, Stages of Venture Capital Financing

Unit X: Credit Rating: Concept, Credit Rating Process, Advantages of Credit Rating, Issues related with Credit Rating

Unit XI: Merchant Banks: Concept, Function, Code of Conduct, Regulatory Framework

Unit XII: Investment Banking: Introducing Investment Banking, Purpose of Investment Banking

Unit XIII: Leasing: Concept, Features of Leasing, Types of Leasing, Process, Advantages/disadvantages of Leasing

Unit XIV: Hire Purchase: Concept, Rights of Hirer, Leasing vs Hire Purchase

Unit XV: Factoring & Forfeiting: Concept, Mechanism of Factoring, Types of Factoring, Factoring vs Forfeiting

Reference Book

• Kothari Rajesh, Financial Services in India, SAGE Publishing, Latest Edition

IT AND FINTECH ELECTIVES.

<table>
<thead>
<tr>
<th>Course Code- DITF301</th>
<th>Database Management Systems</th>
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Learning objectives:

- Describe the fundamental elements of relational database management systems
- Explain the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra and SQL.
- Design ER-models to represent simple database application scenarios
- Convert the ER-model to relational tables, populate relational database and formulate SQL queries on data.

Unit 1: Introduction, concept of database management systems, advantages of database management systems over traditional file systems have been highlighted.
**Unit 2:** Database core concepts of data model, database core concepts of data model, schemas, instances, and data independence, various DBMS components and classification of database management systems.

**Unit 3:** Secondary storage devices various secondary storage devices, the different ways and means of record storage and record retrieval

**Unit 4:** Different types of indexes different types of indexes and their importance in retrieval of records

**Unit 5:** Entity-Relationship (E-R) Model concepts of Entity-Relationship (E-R) Model

**Unit 6:** Relational Algebra for DBMS relevance of the concepts of Relational Algebra with respect to database management systems

**Unit 7:** Relational Calculus for DBMS relevance of the concepts of Relational Calculus with respect to database management systems

**Unit 8:** Structured Query Language (SQL) evolution and importance of Structured Query Language (SQL)

**Unit 9:** Normalization and Functional Dependencies evolution of the concepts of Normalization and Functional Dependencies in the context of rectifying redundant data

**Unit 10:** Transaction processing for DBMS ways and means the transaction processing being carried out in database management systems.

**Unit 11:** Concurrency control concept and importance of concurrency control and various concurrency control techniques.

**Unit 12:** Recovery of data various recovery techniques used in recovery of data in case of database systems failure

Unit 13: Distributed DBMS and Client Server model concepts of distributed database management systems along with client-server model.

**Unit 14:** Objects oriented databases concepts of Objects oriented databases relational databases.

**Unit 15:** Security and integrity various issues of security and integrity, authorization in database management systems security specifications in SQL.

**Reference Book**

1. Kroenke, Database Processing, Pearson Education
2. Garcia, Ullman, Data Base Implementation, Pearson Education
3. Garcia, Ullman, Data Base The Complete Book, Pearson Education
4. Kahate, Introduction to Database Management System, Garcia, Ullman, Data Base Implementation, Pearson Education
7. Abraham, Korth, Data Base System concepts, McGraw Hill.
8. Pratt, Concept of Data Base Management, Thomson Learning, Vikas Publishing House, New Delhi
10. Date, C.J., Introduction to Database System 8e, Pearson Education.

<table>
<thead>
<tr>
<th>Course Code- DITF302</th>
<th>Software Engineering</th>
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</thead>
</table>

Learning objectives:
- Methods and tools to design, implement, test, document, and maintain a software system
- Apply empirical and mathematical research methods, techniques, and problem-solving approaches for developing software.
- Access, retrieve and evaluate relevant professional information reliably
- Methods and tools for analyzing complex real-world problems and devise software-based solutions

Unit 1: The Process and the Product overview of software and software engineering, the process and product of software engineering, including the process framework, different process patterns, and different process models.

Unit 2: Project Management Concepts, Process and Project Metrics project management process including its five phases, and the types of project metrics, namely, size-oriented, and function-oriented metrics. Software quality metrics, which includes the integration of metrics with software engineering process.

Unit 3: Software Project Planning, Scheduling, Tracking and Risk Management software project planning, scheduling, tracking, and risk management, different project estimation techniques and models, and different phases of software risk management.

Unit 4: Software Reliability concept of software reliability, and software reliability metrics, including programming for reliability, fault avoidance, and fault tolerance.

Unit 5: Software Configuration Management concept of software configuration management (SCM), the software configuration items used in SCM, and the process of SCM. Concepts of version control and change control, the configuration audit, including the configuring status reporting and SCM standards.

Unit 6: System Engineering concept of computer systems engineering, including the types of computer systems engineering, namely, hardware engineering, software engineering, and human engineering. System architecture and its specifications, and system specifications review.

Unit 7: Analysis Concepts and Principles different tasks performed under requirement analysis, and the communication-related problem areas and communication techniques. Different analysis principles including understanding information domain, creating models partitioning the problem, and processing information. software prototyping, prototyping methods and tools, and the software
Unit 8: Design Concepts and Principles design fundamentals and process. This unit also explains some software designs, such as, modular design, data design, architectural design, and procedural design. Design documentation

Unit 9: Software Testing Techniques and Software Metrics fundamentals of software testing. This unit also covers the three forms of testing, namely, white box testing, control structure testing, and black box testing. Automated testing tools

Unit 10: Software Testing Strategies various strategies of software testing, including unit testing, integration testing, validation testing, and system testing. the art of debugging, debugging process and its approaches.

Unit 11: Software Verification This unit covers the different concepts related to software verification, comprising of code reading, static analysis, symbolic execution, proving correctness, and code inspection.

Unit 12: Capability Maturity Model for Software capability maturity model (CMM) for software, including its five maturity levels, its key process areas, and common features.

Unit 13: CMM Based Process Improvement process improvement on the basis of CMM, management sponsorship, commitments and management by fact, useful processes in CMM, training, and customer-supplier relationship in CMM.

Unit 14: Software Quality Assurance software quality assurance (SQA) and quality concepts. quality movement, software reviews and formal technical reviews, software reliability, and background issues. SQA activities and SQA plan.

Unit 15: Object Oriented Concepts and Principles overview of object-oriented concepts. identification and definition of objects, and inter-object communication. OOA modeling, and prototyping.

Reference Book
5. Sommerville, Software Engineering, Pearson Education.
6. Fenton & Pfleeger, Software Metrics, Thomson Learning

Course Code- DITF303 Technology Management

Learning objectives:
- To assess the range, scope, and complexity of the phenomena, issues, and problems related to technology management
• To discuss various problems where particular managerial decisions need to be taken such as technology acquisition and transfer
• To use a range of tools used in technology creation, search, assessment, selection, implementation, utilization, and strategy
• To describe the primary tasks and decisions that are required to turn a technological innovation into a sound business opportunity

<table>
<thead>
<tr>
<th>Unit 1: Introduction to Technology Management</th>
<th>overview of technology management, role and significance, and two forms of technology – process technology, and product technology.</th>
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</thead>
<tbody>
<tr>
<td>Unit 2: Technology Acquisition</td>
<td>meaning and available options for technology acquisition, reasons compelling a company to obtain a new technology, and the management of new technology.</td>
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<tr>
<td>Unit 3: Technology Forecasting</td>
<td>concept, need and role of technology forecasting, forecasting methods and techniques, relation between forecasting and planning.</td>
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<tr>
<td>Unit 4: Technology Strategy and Competitiveness</td>
<td>technology strategy, innovation management, and the components of competitive advantage, create competitive advantage using value chain, evaluate/assess the TM in an organization.</td>
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<tr>
<td>Unit 5: Technology Adoption, Diffusion, and Absorption</td>
<td>concepts of technology adoption, diffusion, and absorption, significance, constituents of a technology package, technological dependence, constraints in technology absorption, issues involved in the management of technology absorption, and benefits of technology absorption, diffusion in taking technological innovation to the market place, and different perspectives on the innovation-diffusion process. successful diffusion process.</td>
</tr>
<tr>
<td>Unit 7: Aspects and Issues in Technology Management</td>
<td>different aspects and issues in technology management, need of technological change, technology life cycle, technology policies and policy instruments, concept of technological change, and its nature and categorization.</td>
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<tr>
<td>Unit 8: Technology Generation and Development</td>
<td>process and determinants of technology generation, and technology development, importance of R&amp;D.</td>
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<tr>
<td>Unit 9: Technology Transfer</td>
<td>models, modes, dimensions, and routes of technology transfer, features of technology package.</td>
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<tr>
<td>Unit 10: Technology Assessment</td>
<td>concept technology choice, the process of technology assessment, and technology leadership and followership.</td>
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<tr>
<td>Unit 11: Managing Technology Based Innovation</td>
<td>relation between innovation and technology, process of technology-based innovation, measures of innovative performance, characteristics of innovative work environment, and the key areas of management focus.</td>
</tr>
<tr>
<td>Unit 12: Product Technology</td>
<td>concept of product development, and role of government in technology development relation between technology, development, and competition, and the management of R&amp;D, and management of intellectual property.</td>
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<tr>
<td>Unit 13: Knowledge Based Technologies and Knowledge Management</td>
<td>overview of knowledge</td>
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</tbody>
</table>
based technologies, and role of artificial intelligence techniques. It covers knowledge management techniques for technology management.

**Unit 14:** Human Aspects in Technology Management Different human aspects in technology management, covering the integration of people and technology, organizational and psychological factors affecting technology management, and the relation between organizational structure and technology management.

**Unit 15:** Social Issues in Technology Management Social issues in technology management, covering technological change and industrial relations, and the technology assessment and environment impact analysis.

**Reference Book**
1. Shankar’ Dubey, Sanjiva, Technology and Innovation Management
2. Dr. Yogesh Wasudeo Bhowte, Technology Management Research and Development
3. Henry Lucas, INFORMATION TECHNOLOGY FOR MANAGEMENT

<table>
<thead>
<tr>
<th>Course Code- DITF304</th>
<th>Business Intelligence and Tools</th>
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**Learning objectives:**
- Understand the essentials of data analytics and the corresponding terminologies
- Be familiar with the steps involved in the analytics process and explain the process of data analytics, including the six steps of the Cross-Industry Standardized Process for Data Mining
- Be able to interact competently on the topic of data analytics and know the fundamental principles of data science and business analytics that form the basis for data mining processes, algorithms, and systems.
- Have had some hands-on experience in using data analytics techniques

**Unit 1:** Business Intelligence an Introduction definition of “Business Intelligence” and explains the different ways of evaluating Business Intelligence. value of Business Intelligence and its applications.

**Unit 2:** Business Essentials Business essentials, concept of converting large amounts of corporate data into useful information. Business Intelligence Environment and platform, the role of business intelligence, and the business landscape.

**Unit 3:** Business Intelligence Types types of business intelligence tools, which are a type of application software designed to report, analyse, and present data in various organisations.

**Unit 4:** Architecting the Data Enterprise data model, granularity of data, and various techniques of data reporting and querying. values of a good design flow for information, data partitioning, and total data quality management.
Unit 5: Introduction to Data Mining concepts of data mining. It explains how the Data Mining works, its advantages and disadvantages, and the ethical and global issues of mining.

Unit 6: Data Mining Techniques Data Mining Techniques statistics used in data mining and various techniques used to identify patterns in datasets. It also gives an overview of information processing models and its applications.

Unit 7: Introduction to Data Warehousing Data Warehousing and its various characteristics, the differences in online transfer processing and online analytical processing. different data models for multidimensional databases, Online Analytical Processing (OLAP) tools and practical applications of OLAP.

Unit 8: Different Ways of Data Warehousing This unit explains about different types of business models.

Unit 9: Knowledge management Knowledge Management, the need and significance of knowledge management. generating, using and storing knowledge and the various technologies used for knowledge management.

Unit 10: Data Extraction process and techniques used for data extraction and the values of identifying source of data

Unit 11: Business Intelligence Life Cycle Business Intelligence lifecycle and the Enterprise Performance Life Cycle (EPLC) Framework. successful implementation of a project is effected by human factors and the strategies used in BI like creating a roadmap and project planning. choose between centralised or decentralised BI architecture, stages in developing BI.

Unit 12: Business Intelligence User Model history of Business Intelligence and gives an overview of analysing the opportunity in BI. application of Dashboards and Online Analytical Processing (OLAP) in BI. types of end users using BI application and the concept of content management system.

Unit 13: Business Intelligence Issues and Challenges challenges, while implementing BI and the process of developing the BI application. Issues like effects of inaccurate information and understanding customer pain points.

Unit 14: Business Intelligence Strategy and Roadmap strategies involved in a BI solution. various factors that need to be taken in to account, while devising a plan for a BI.

Unit 15: Implementing Business Intelligence the various aspects governing the choice and the right platform for any BI. BI products and vendors.

Reference Book

1. R.K. Jena, IT and Business Intelligence
2. Ramesh Sharda, Dursun Delen, et al., Business Intelligence and Analytics: Systems for Decision Support
3. Ramesh Sharda / Dursun Delen / Efraim Turban, Business Intelligence, Analytics, and Data Science: A Managerial Perspective | Fourth Edition | By Pearson
4. Turban, Decision Support and Business Intelligence Systems, 9e

**OPERATIONS MANAGEMENT ELECTIVES**

<table>
<thead>
<tr>
<th>Course Code- DOMS301</th>
<th>Production and Operations Management</th>
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**Learning objectives:**
- Explain the importance of forecasting and demonstrate the ability to apply some mathematical forecasting techniques.
- Demonstrate an understanding of the concept of aggregate planning.
- Demonstrate an understanding of the problems involved in inventory management.
- Demonstrate an understanding of the principles underlying materials requirements planning and operations scheduling.

**Unit 1:** Overview of Operations Management definition of “Operations Management” and the different functions and activities of Operations managers emerging business trends in Operations Management.

**Unit 2:** Frameworks for Operations Management Porter’s value chain and the relation between operations and marketing. Product life cycle and the six P’s of operations mix.

**Unit 3:** Competitiveness and Strategy definition of “Productivity” and its importance. effective strategies to competitive organizations.

**Unit 4:** Profitability of Business Operations definition of “Profitability” and its importance. various types of costs. concepts of cash flows basic concept of financial decision making.

**Unit 5:** Break-Even Analysis, Operations Cost Management definition of “Operations Cost” and the factors influence operations cost. concept of ‘Break Even’ point.

**Unit 6:** Facilities Location Planning role of globalization in location planning. importance of location decisions and the various available options, while making location decisions.

**Unit 7:** Forecasting elements of a good forecast. various steps involved in the process of forecasting qualitative techniques of forecasting and its merits and demerits.

**Unit 8:** Workforce Planning and Productivity concept of systems of productivity and performance measurement key elements of workforce performance. process of managing a workforce and effecting improvement in various functioning of management.

**Unit 9:** Capacity Planning and Material Handling principals involved in designing integrated material handling systems. importance of a good layout in enabling efficient material handling.

**Unit 10:** Lean Operations and Time-Based Competitiveness definition of “Lean Operations”. It also deals development of time-based competitiveness design for manufacture and simultaneous engineering.

**Unit 11:** Quality Systems in Operations “Quality” and the various methods to achieve quality can be achieved
Unit 1: Introduction to ERP concept of ERP, gives a brief history of the evolution of ERP, assesses the benefits of ERP, and analyses the reasons for the failure of ERP.

Unit 2: Enterprise - An Overview role of Enterprise, assesses the need of an Enterprise, business modelling approaches, method to integrate the management information into the enterprise.

Unit 3: ERP and Related Technologies technologies related to ERP systems. analyse business functions efficient ERP implementation. ERP Systems MIS, DSS, and EIS new technologies and concepts data warehousing, data mining, OLAP, and Supply Chain Management (SCM) efficiency, and effectiveness of ERP systems.

Reference Book


Course Code- DOMS302 Enterprise Resource Planning

Learning objectives:
- To provide a contemporary and forward-looking on the theory and practice of Enterprise Resource Planning Technology.
- To focus on a strong emphasis upon practice of theory in Applications and Practical oriented approach.
- To train the students to develop the basic understanding of how ERP enriches the business organizations in achieving a multidimensional growth.
- To aim at preparing the students technological competitive and make them ready to self-upgrade with the higher technical skills

Unit 12: Independent Demand Inventory Control different types and uses of inventory various inventory management techniques cycle counting in inventory record accuracy.

Unit 13: Statistical Quality Control definition of “Statistical Quality Control” methods associated with descriptive statistics definition of probability distribution.

Unit 14: Failure Prevention and Recovery various ways of measuring failure. different approaches to maintenance importance of failure recovery.

Unit 15: Challenges in Operations to set an implementation agenda, strategies into practice. decisions resulting from operations strategies ethical dimension.
Unit 4: ERP Tools and Software and Selection Methodology and criteria used in ERP selection. ERP selection process, analyse ERP tools, ERP vendors, ERP vendor selection process.

Unit 5: ERP Modules popular modules of an ERP package like finance, manufacturing, plant maintenance, materials management, subsystems / sub-modules of models modules function.

Unit 6: ERP – A Manufacturing Perspective introduces techniques and technologies used in the manufacturing industry. how ERP and other concepts like MRP, MRP-II, CAD/CAM, PDM, and so on to improve the competitiveness of a company, and assess the different types of manufacturing operations like MTS, MTO, ETO, ATO, and CTO, and so on

Unit 7: ERP – A Purchasing and Sales Perspectives This unit explains the functioning of the purchasing department in an organisation. It elucidates the features and benefits of ERP – Purchase module analyses the importance of the Sales and Distribution module and describes the functioning of various sub-module of the Sales and Distribution module.

Unit 8: ERP – An Inventory Control Perspective This unit explains inventory management and its function, lists out the features of inventory management, elucidates the benefits and drawbacks of inventory management. It analyses how ERP inventory systems can be installed and implemented, explains Web ERP and its benefits, illustrates the types of inventory management, and the process of transactions in an organisation, and also describes Inventory ERP software module.

Unit 9: ERP – CRM Perspective This unit explains the concept of CRM, describes the types and submodules of CRM, lists out the benefits and challenges of CRM, and elucidates the implementation of CRM.

Unit 10: ERP – HR Perspective & Finance Perspective This unit explains the concept of Human Resources (HR), describes the activities of Human Resource Management systems, lists out the benefits and features of the Human Resources Management module. It elucidates the role of ERP in Human Resource Management systems and explains the role and workflow of ERP in the financial module of an organisation.

Unit 11: ERP Implementation Lifecycle This unit describes the implementation lifecycle for an ERP package, assess the various approaches for implementation of ERP, and select the right methodology for ERP implementation.

Unit 12: Benefits of ERP This unit compares the direct and indirect benefits of ERP implementation. It explains how the integration of information and automation of business processes make improvements possible.

Unit 13: ERP MarketThis unit describes the ERP market, explains the major player in it, and their respective market share. It assesses the various market trends in ERP, recognises the target market of ERP, analyses and tells how to potentially use ERP in the market-driven economy, and assess the seven major ERP vendors—SAPAG, Baan, PeopleSoft, JD Edwards, Oracle, QAD and SSA.

Unit 14: ERP Vendors, Consultants, and Users This unit evaluates the three major players in an ERP implementation and their profiles. It describes the roles of each of these players and elucidates the reasons for the success of an ERP implementation.

Unit 15: Future Directions in ERP This unit describes the future direction of the ERP market and trends. It elucidates how these trends will shape the future ERP products. It also describes how ERP vendors, striving for more market share are making their products
more efficient and loaded with features by using new technological innovations.

Reference Book


Course Code- DOMS303 Logistics and Supply chain Management

Learning objectives:
- To describe the increasing significance of logistics and its impact on both costs and service in business and commerce.
- To incorporate and learn the critical elements of logistics and supply-chain management processes based on the most relevant application in forward-thinking companies.
- To develop criteria and standards to achieve improved business performance by integrating and optimizing the total logistics and supply-chain process.
- To describe the ways to shift the business culture from functional work to overall process-driven results.

Unit 1: Overview of Supply Chain Management This Unit explains the definition of supply chain and Supply Chain Management, the evolution of Supply Chain Management, and the application of Information Technology in Supply Chain Management.

Unit 2: Logistics of Distribution This unit deals with the concept, importance and the process of logistics in an organization. It also explains the technological effect on a logistics information system and to classify the domestic and international challenges before logistics.

Unit 3: Planning and Designing the Supply Chain This unit explains the concept of supply chain integration, analysis of supplier selection and development and also to assess forecasting in the supply chain in the process of planning and designing.

Unit 4: Partnerships in Supply Chain Management This unit explains the benefits of partnering in the supply chain, ways to conquer obstacles in supply chain coordination and access mutual relationship in outsourcing, and supply chain.
### Unit 5: Collaborative Partnership and Replenishment in Supply Chains
This unit deals with the definition, origin, assessing models and benefits and scope of CPFR. It also explains to assess customer service and replenishment.

### Unit 6: The Influence of Supply Chain Management
This unit deals with the process of creating customer value and satisfaction. It also explains how to influence customer behaviour.

### Unit 7: Procurement Management
This unit describes the meaning of procurement and explains the contract process and procurement management.

### Unit 8: Assessment of Supply Chain Management
This unit deals with the different ways for conducting assessments of the Supply Chain Management process.

### Unit 9: Mapping for Supply Chain Management
This unit deals with relation-based mapping with respect to supply chain management and analyse supply chain relation with respect to telecom. It also describes time-based process mapping, pipeline inventory process mapping, and extended value stream maps.

### Unit 10: Development of Supply Chain Management Systems
This unit deals with the concept and nature of Supply Chain Management, benefits of the system of supply chain and analyse of various concepts of Supply Chain Management system.

### Unit 11: Information Systems in Supply Chains
This unit deals with the role of Information Systems in the supply chain. It also deals with the role and impact of e-business in a supply chain process.

### Unit 12: Role of Marketing in SCM
This unit deals with the concept of marketing and explains an integrated framework for the role of marketing in Supply Chain Management.

### Unit 13: Reverse Supply Chain Management
This unit deals with the concept, need for and importance of Reverse Supply Chain Management (RSCM). It also deals with the impact of RSCM on profitability.

### Unit 14: Supply Chain Management: The Next Steps
This unit deal covers the two process-based frameworks, that is GSCF and SCOR for Supply Chain Management, and compares their strength and weaknesses. It also analyses the importance of value creation in Supply Chain Management frameworks.

### Unit 15: Information Technology (IT) for Supply Chain Management
This unit explains the concept of the supply chain and the origin of IT in Supply Chain Management. It also deals with emerging technologies used in supply chain and the impact of IT on Supply Chain Management.

### Reference Book
1. Bozarth, Cecil C. & Handfield, Robert B.; Introduction to Operations and Supply Chain Management; Pearson Education; New Delhi
2. Wisner, Joel D., Leong, G. Keong & Tan, Keah-Choon; Principles of Supply Chain Management – A balanced approach; Thomson Learning; New Delhi
3. Gaither, Norman & Frazier, Greg; Operations Management; Thomson Learning; New Delhi
4. Mahadevan, B.; Operations Management – Theory and Practice; Pearson Education; New Delhi
5. Krajewski, Lee J. & Ritzman, Larry P.; Operations Management – Processes and Value Chains; Pearson Education; New Delhi
Learning objectives:
- Analyze any real life system with limited constraints and depict it in a model form.
- Analyze any real life system with limited constraints and depict it in a model form.
- Solve the mathematical model manually as well as using soft resources/software such as excel solver, CPLEX etc.
- Understand variety of problems such as assignment, transportation, travelling salesman etc. Enterprise Resource Planning

Unit 1: Introduction Origin of Operations research, use in day to day life. Relevant examples

Unit 2: Defining and mathematical formulation of a problem Gathering data of a problem, identifying the main objective, identifying constraints, forming the full mathematical model. Identifying decision variables.

Unit 3: Solving a problem using graphical method Drawing graph of a straight line. The intersection of lines. Identifying feasible region. Corner point solution. Infeasible solution.

Unit 4: Introduction to linear programming The Linear programming model, Assumptions of Linear programming, Examples.

Unit 5: The simplex method The essence of the simplex method, Algebra of the simplex method, the Simplex method in tabular form.


Unit 7: Duality theory The essence of duality, Economic Interpretation of Duality, Primal-dual relationship.

Unit 8: Sensitivity Analysis Role of duality in sensitivity analysis, Essence of sensitivity analysis, Applying sensitivity analysis, performing sensitivity analysis on a spreadsheet

Unit 9: Solving linear programming using excel solve Define and enter data for the model in excel. Defining the objective, constraints in excel. Running excel solver to get an output of the Linear program. Analysing the output.

Unit 10: Transportation Problem Definition of transportation problem. A streamlined simplex method for the transportation problem.

Unit 11: Assignment Problem Definition of the assignment problem. A special algorithm for the assignment problem.

Unit 12: Dynamic Programming Prototype example, Characteristics of Dynamic programming

Unit 13: Integer Programming Applications, Use of binary variables in model formulation, Some
formulations, Branch and Bound technique to solve Integer programming and mixed-integer programming

**Unit 14:** Non-linear programming Applications, Graphical illustrations, one variable unconstrained optimization, multivariable unconstrained optimization, KKT Conditions, Quadratic Programming, Convex and Non-convex Programming.

**Unit 15:** Metaheuristics Relevance and need of metaheuristics, Tabu search, Simulated Annealing and Genetic Algorithms.

**Reference Book**
7. Introduction to Operations Research by Frederick S. Hillier (10E, 2014)

**SEMESTER – IV**

<table>
<thead>
<tr>
<th>Course Code- DMBA401</th>
<th>STRATEGIC MANAGEMENT AND BUSINESS POLICY</th>
</tr>
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**Learning objectives:**
- To be aware of key concepts, tools and principles of business policy and strategic management
- To appreciate the strategic management process and the difference between strategic analysis, strategy formulation and strategy implementation
- To understand how strategic plans and policies are integrated, implemented and controlled, and to comprehend the culture and ethical factors that influence these management activities
- To analyze the new knowledge and use existing knowledge to conduct strategic and competitive analysis using various tools (e.g., five forces model, SWOT analysis, Portfolio matrix models) in a variety of industries

**Unit 1 –** Introduction to Strategies: Introduction, Fundamentals of Strategy, Conceptual Evolution of Strategy, Scope and Importance of Strategies, Purpose of Business, Difference between Goals and Objectives of Business, Strategic Intent through Vision and Mission Statements, Core Competencies of Business

**Unit II –** Strategic Management: Introduction, Strategic Management, Need, scope, key features and importance of strategic management, Role of Strategists in Decision Making, strategists at various management levels, Types of Strategies, Limitations of Strategic
Management


Unit V – Strategic Control and Evaluation: Introduction, Strategy Evaluation, Strategic Control, Difference Between Strategic Control and Operational Control, Concept of Synergy and its Meaning, Key Stakeholder’s Expectations


Unit IX – Business Investment Strategies: Introduction, Business Plan and Business Venture, Business Investment Strategies

Unit X – Strategies for Multinational Corporations: Introduction, Multinational Corporations (MNCs), Benefits of MNCs, Limitations of MNCs, Business Strategies of MNCs, Techniques Employed by MNCs to Manage Markets, MNC, TNC and Global Companies

Unit XI – Strategic Alliances: Introduction, Strategic Alliances, Types of Strategic Alliances and Business Decisions, Problems Involved in Strategic Alliances

Unit XII – Role of Creativity and Innovation in Business: Introduction, Creativity, Innovation, Creating and Building Creative and Innovative Business Culture, Business Practices Adopted to Promote Creativity and Innovation, Importance of Creativity and Innovation in Business, Challenges Involved in Creativity and Innovation

Unit XIII – Business Ethics and Corporate Social Responsibility: Introduction, Ethics and Values, Ethical Conduct and Unethical Conduct, Impact of Ethical Conduct, Corporate Social Responsibilities (CSR), Business obligations, Social Audit and Corporate Governance

Unit XIV – Challenges in Strategic Management: Introduction, Strategic Management as an Organisational Force, Dealing with Strategic Management in Various Situations, Strategic Management Implications and Challenges

Unit XV – Recent Trends in Strategic Management: Introduction, Strategic Thinking,
Learning objectives:

- To be equipped with the knowledge, skills, and abilities to understand the global economic, political, cultural and social environment within which firms operate
- To gain knowledge in international business environment, strategies and management
- To be aware of the global business environment and its impacts on businesses
- To apply the current business phenomenon and to evaluate the global business environment in terms of economic, social and legal aspects
- To analyze the principle of international business and strategies adopted by firms to expand globally

Unit I – Introduction to International Business: Introduction, Elements of International Business, Globalisation

Unit II – International Trade theories and their application: Introduction, Why do nations trade, Theories of International trade- mercantilism, Absolute advantage, Comparative advantage, Heckscher-Ohlin, Product life cycle theory and Porter’s diamond model


Unit IV – Culture and International Business: Introduction, Meaning of Culture, Country Culture, Culture in an International Business Organization

Unit V – Foreign Investments- Types and Motives: Foreign investments, types of foreign investments, motives

Unit VI – Regional integration: Introduction, Overview of Regional Integration, Types of Integration, Regional Trading Arrangements, India and Trade Agreements

Unit VII – Global trade institutions: Introduction, World trade organization (WTO), International Labour Organisation (ILO)


Learning objectives:

- Develop an understanding of the various leadership styles and attributes
- Evaluate the importance of leadership skills for organizational success for skill development
- Application of own leadership skills to entice employability

Unit I – Basic Definition, Concept and Components of Leadership, Personal Characteristics of an Effective Leadership, Leader and Values, The Significance of Self-Knowledge for The Role of Leaders, Leadership theories, styles, Attributes, Effectiveness, Measurement,

Unit II – Trait, Behavioural and Skills Approach in Theories of Leadership, Contingency Theories in Leadership, Path Goal Theory in Leadership, Leader-member Exchange Theory in Leadership, Ways and Reasons to adopt New Leadership Approach, Negotiation techniques, Conflict resolution
Unit III – Significance of Emotional Intelligence and Self-Management in the Role of Leader, Ways to Handle Emotions and Stress, Personal Risk of Leader and Criteria for Success, Personal Traits Endangering Effective Leadership, Articulating Vision, Decision making- Individual decision making, group decision making, Strategy development

Unit IV – Change Management, Relationship between leadership and power, Difference between management and leadership, Model of four Competencies for Leadership, Situational Leadership I and II Models of Well Balanced and Authentic Leadership, The Contingency Theory of Leadership, Functional, Relational, and Transformational Approaches in Leadership

Unit V – Group Structure, Group Dynamics and Individuals, Formation of Teams and Team Work, Group Problem Solving, Leadership of Workgroups and Teams, Team Excellence, Participative Leadership Persuasion and influence, Role of ethics and values in leadership

Unit VI – Skills for Leadership and Performance Management, Goal Setting, Support of Employee Development and Communication of Feedback, Leadership Development-Delegation, Solving the Conflict Situation and Negotiation, Coaching and Mentoring, Tools for Analysis of Leadership Styles and 360-degree, Feedback Leading teams, Leading high performing teams, leading dysfunctional teams, Resolving workplace conflicts, Establishing work culture

Unit VII – Sources of Power in Organisations, Micropolitics, Its Strategy and Tactics, Gender and Leadership, Difference between Power and Leadership, Importance and Types of Power in Leadership, Preparing for leadership role, Assessing the current situation and a vision for future, developing strategies

Unit VIII – Link Between Leadership and Activities Leading to the Formation, Assertions or Changes in Organisational Culture, Intercultural Aspects of Leadership, Differences in the Accentuation of Various Aspects of Leadership (National Cultures Context), Culture for success, Sustaining organization for challenges ahead

Unit IX - Sources of Motivation, Motivation and Performance, Performance Motivation, Aspirations, Work Satisfaction and Social Perception in Organisation, Significance of Communication Skills for Work Life and Leadership, Impact of Motivation on Personality and Organisation

Unit X - Role of Women as Leaders, Ethical Leadership, Dark side of Ethical Leadership, Followership Culture and Leadership, Ways to Overcome Challenges and Empower Women in Leadership, Women in Leadership-Inspiring Positive Change

Reference Books:

- John Maxwell Developing the Leader within You. Thomas Nelson Publishing
Every student shall undertake Project work in the III semester starting with the project synopsis and culminating with the project report in the IV semester. Students are encouraged to choose a project, of six months’ duration either at place of work or any other location, in the chosen area of specialization to complete the Programme. The project work is equivalent to four credits.

**ELECTIVES SEMESTER – IV**

**FINANCE ELECTIVES**

<table>
<thead>
<tr>
<th>Course Code- DFIN401</th>
<th>INTERNATIONAL FINANCIAL MANAGEMENT</th>
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Learning objectives:
- To understand the functioning of the foreign exchange market and international financial markets
- To assess the feasibility of cross-border investment opportunities
- To foresee and identify the risks arising out of exchange rate volatility and develop strategies to manage them
- To be aware of the various types of financing available for foreign trade


**Unit II –** Balance of Payments: concepts and principles of balance of payments and its various components. The Current Account Deficit and Surplus and Capital Account Convertibility

**Unit III –** Foreign Exchange Market: origin of the concept of foreign exchange, the difference between fixed and floating rates. Foreign exchange transactions and the derivative instruments traded in foreign exchange market such as forwards, futures, swaps, and options

**Unit IV –** Currency Derivatives: Forward markets and the different concepts, currency futures markets and currency options markets and functions

**Unit V –** Exchange Rate Determination: Exchange rate movements, factors that influence exchange rates, movements in cross exchange rates, concepts of international arbitrage, interest rate parity, purchasing power parity and the International Fisher effect

**Unit VI –** International Financial Markets: Basic concepts of the international money market. International credit markets (loans in various forms) from the creditors/investors

**Unit VII –** Foreign Trade Finance: concept of foreign trade finance. Concepts of financing exports and financing imports and documentary collections, factoring, forfeiting and countertrade
Unit VIII – Nature and Measurement of Foreign Exchange Exposure: nature and measurement of foreign exchange exposure. Types of exposures and the various types of translation methods

Unit IX – Management of Foreign Exchange Exposure: concept of exposure forward and foreign exchange exposure, various tools and techniques of foreign risk management and the risk management products

Unit X – International Capital Structure: International capital structure, cost of capital, the capital structure of MNCs, cost of capital in segmented versus integrated markets

Unit XI – International Capital Budgeting: Introduction to international capital budgeting, adjusted present value model, capital budgeting from parent firm’s perspective and expecting the future expected exchange rate analysis

Unit XII – Country Risk Analysis: country risk factors, assessment of risk factors. Techniques through which the country risks can be assessed as well as measured

Unit XIII – International Taxation: international tax system, principles of taxation, double taxation, tax havens and transfer pricing. International tax management strategy and Indian tax environment

Unit XIV – Foreign Direct Investment, International Portfolio and Cross-Border Acquisitions: flow, cost and benefits of Foreign Direct Investment, ADR and GDR, concept of portfolio, cases on cross border acquisitions

Textbook:
Multinational Financial Management, Alan C. Shapiro, Wiley India Private Limited

Reference Book:

Course Code- DFIN402 | TREASURY MANAGEMENT

Learning objectives:
- To understand the role and significance of treasury in an organization
- To be able to describe the treasury management practices
- To understand the exposure measuring techniques
- To be able to implement the hedging techniques for various types of risk

Unit I – Introduction to Corporate Treasury Management: Overview of Corporate Treasury Management, need and benefits, functions and Treasury exposures. Organisation structure of treasury

Unit II – Financial Markets: The Money Market - money market, types of financial markets (the other is capital market). Money market instruments and regulation of the market

Unit III – Financial Markets: Capital Market - Type of financial markets viz. capital
market. Stock market (both equity and preference) and debt market. Regulation of capital market, commodity markets

**Unit IV** – Treasury Products: Treasury products for foreign exchange (forex) markets and forex derivatives. Commodity market instruments

**Unit V** – RBI and the Foreign Exchange Market: Crucial role of our country’s central bank i.e. Reserve Bank of India (RBI) in forex management. Foreign Exchange Management Act (FEMA)

**Unit VI** – Liquidity Planning and Managing Cash Assets - Introduction of treasury management – liquidity: Planning and control of liquidity CMS or cash management systems (both domestic and international), role of working capital management in liquidity

**Unit VII** – Business Risk Management: Business risks, Measurement of business risks and mitigation by effective treasury management

**Unit VIII** – Corporate Liquidity Risk Management: Type of risk, liquidity risk, origin of liquidity risk, tactics for mitigating the risk

**Unit IX** – Interest Rate Risk Management- Treasury risk, interest rate risk, traditional and modern theories of interest rate, management strategies and the role of financial intermediaries

**Unit X** – Financial Risk - Financial risks of a business, types of financial risks and its dimensions, strategies of corporate financial risks, Enterprise Risk Management (ERM)

**Unit XI** – Foreign Exchange Risk Management: Risk of forex fluctuations, impacts of global milieu, Types of forex risks, strategies for managing the risk, comprising policies, procedures and controls

**Unit XII** – Working Capital Management: Introduction, need for working capital, cash cycle, management strategies for working capital, perspective of the Treasury function

**Unit XIII** – Treasury Risk Management: Treasury risks, Role of asset-liability management

**Unit XIV** – Integrated Treasury: Introduction, Responsibilities of Treasury, Accounting risks associated with financial reporting and disclosure of treasury exposures in the balance sheet

**Textbook:**

Treasury Management in India, V.A. Avadhani, Himalaya Publishing House

**Reference Book:**

Treasury Management: Indian Institute of Banking & Finance, Macmillan

**Course Code- DFIN403** | **MERCHANT BANKING AND FINANCIAL SERVICES**

**Learning objectives:**

- To be able to explain the significance of merchant banking in the financial system
• To describe the functions of merchant bankers in the capital markets
• To understand the various types of financial services

Unit I – Merchant Banking and Financial Services: Introduction, concept of merchant banking, financial system in India, development of merchant banks and regulations

Unit II – Issue Management: Pre-issue and Post-issue management activities performed by merchant banks

Unit III – Underwriting and Brokerage: Different roles played by underwriters and brokers in issue management and their responsibilities

Unit IV – Raising Capital from International Markets: Needs of Indian companies for raising funds from foreign markets, usage of euro, evaluation of various types of depository receipts - American Depository Receipts, Global Depository Receipts, FCCBs and FCEBs

Unit V – Financial Services: Financial services in India, types and importance, online trading, dematerialization and re-materialization

Unit VI – Depository System in India: Depository system, the Depository Act of 1996 and depository participants. NSDL, CDSL and benefits of a depository system

Unit VII – Mutual Funds and AMCs: Mutual funds, various types of mutual fund schemes, advantages and disadvantages of investing in mutual funds, legal structure and the regulation of mutual funds in India

Unit VIII – Lease: Leasing, benefits and limitations, types of leasing

Unit IX – Hire Purchase: Important financial innovations, lease financing and hire-purchase financing

Unit X – Mergers and Acquisitions: Introduction of mergers and acquisitions, benefits of mergers, the procedure and theories of mergers and the legal aspects governing mergers, acquisitions and takeovers in India

Unit XI – Portfolio Management: Introduction of portfolio management, theories of portfolio management, techniques of portfolio evaluation and measures of portfolio revision

Unit XII – Credit Rating: Introduction of credit rating, processes, scope of credit rating agencies in India

Unit XIII – Securitization of Debts: Introduction of securitization, features, advantages and the steps involved in the securitization process, guidelines laid down by the Securitization Act, 2002

Unit XIV – Venture Capital Funds: Introduction of venture capital fund, features, emergence of venture capitalism in India

Unit XV – Factoring: Process and features of factoring, types of factoring contracts, advantages and disadvantages of factoring, differences between factoring and bill discounting, process of factoring as it exists in India, process of forfeiting
Textbook: 
Merchant Banking & Financial Services, Dr. S. Gurusamy, McGraw Hill Education

Reference Book: 
Merchant Banking & Financial Services, Madhu Vij & Swati Dhawan, Tata McGraw Hill Education

Course Code- DFIN404 | INSURANCE AND RISK MANAGEMENT

Learning objectives:

- To gain knowledge of concept of risk and its significance
- To explain the techniques of risk identification, risk measurement and risk management
- To be aware of the basic principles of insurance
- To be aware of the function of insurance

Unit I – Risk: An Introduction, interpretations of the term ‘risk’, types of business and personal risks, significance of risk management function within business organizations

Unit II – Insurance and Risk: Significance of insurance and risk, general structure of the insurance market, significant aspects of this industry

Unit III – Reforms in Indian Insurance Industry: Importance of the privatization of insurance industry, problems associated with public insurance enterprises, relation between insurance and economic growth

Unit IV – Regulations Relating to Insurance Accounting and Management: Framework for IRDA rules and regulations regarding general insurance investment in the country, role of financial reporting in managing insurance operations, significance of determining solvency margins

Unit V – Life Insurance: Factors influencing the key functioning of insurance organizations, insurable interest, role of riders in insurance policies

Unit VI – Non-life Insurance - I: Elements of fire insurance contract and its ancillary features, significance of marine insurance and its various policies, the role of rural insurance in making people’s lives better in rural India

Unit VII – Non-life Insurance – II: Types of motor insurance policies, critical aspects of aviation industry in the country, significance of liability insurance in India

Unit VIII – Functions and Organization of Insurers: Components of the distribution system of life insurance companies in the country, role of agents in the life insurance sector in India, important activities carried out in a life insurance organization

Unit IX – Product Design and Development: Product development in the life and non-life insurance sectors in India, role of risk evaluation in the process of insurance product
formation, future trends in the domain of insurance product design and development

Unit X – Insurance Underwriting: Need for insurance underwriting, factors that affect the activities performed by the underwriter, steps involved in the process of insurance underwriting

Unit XI – Claims Management: Factors affecting the insurance claim management system, types of documents needed in various types of claims, meaning of ‘Causa Proxima’ in insurance claim settlement

Unit XII – Insurance Pricing and Marketing: principles of insurance pricing and marketing, tools and techniques used in pricing individual life and health insurance

Unit XIII – Financial Management in Insurance Companies and Insurance Ombudsman: Importance of financial management in insurance companies, tools of managing expenses in the insurance companies, modes used by the insurance companies in channelizing their funds

Unit XIV – Reinsurance: Reinsurance in the insurance sector. Areas of the application of reinsurance

Unit XV – Information Technology in Insurance: Application of information technology in the insurance sector, role of insurance companies in insurance security, contours of the future of insurance in rural areas

Textbook:
Principles of Risk Management & Insurance, George E. Rejda & Michael McNamara, Pearson

Reference Book:
Risk Management & Insurance Planning, Jatinder Loomba, PHI Learning

MARKETING ELECTIVES

| Course Code- DMKT401 | SERVICES MARKETING AND CUSTOMER RELATIONSHIP MANAGEMENT |

Learning objectives:
- Examine the nature of services, and distinguish between products and services
- Identify the major elements needed to improve the marketing of services
- Develop an understanding of the roles of relationship marketing and customer service in adding value to the customer's perception of a service
- Recognise how services marketing principles can be used as a conceptual framework to help managers identify and solve marketing problems

Unit I – Nature and Scope of Services: Introduction, meaning of services, unique characteristics, difference between services and tangible products, service sector, classification of services, growth of service sectors and service industries
### Unit II – Services Marketing: Introduction, concept and evolution of services marketing, meaning of service marketing, myths encountered in services, need for service marketing, and growth in Services Marketing

### Unit III – Services Marketing: Mix and Gaps Model Introduction, 7Ps of service marketing, service gaps framework, perceived service quality, models of service marketing

### Unit IV – Service Design and Service Delivery: Introduction, Service delivery process, service encounters and Moments of Truth, employee role in service delivery, service employee-criteria, importance and emotional approach, role of service provider, intermediaries involved in Service Process and Service Delivery

### Unit V – STP: Strategy for Services Introduction, Need for segmentation of services, basis of segmentation services, segmentation strategies in service marketing, need for targeting and positioning of services, positioning strategies for services, positioning Through Product/Service Delivery Strategies, Positioning Through Pricing Strategies, Positioning through Distribution Strategies, positioning through Sales Promotion and Advertising, Service Differentiation Strategies

### Unit VI – Consumer Behavior in Services Marketing: Introduction, Customer Expectations in Services, Service Costs Experienced by Consumer, the Role of customer in Service Delivery, Conflict Handling in Services, Customer Responses in Services, Concept of Customer Delight

### Unit VII – Service Development and Quality Improvement: Introduction, Types of New Service Development and its Stages, Types of new services, Stages in new service development, Service Costs Incurred by the Service Provider, service Blue Printing, service Development – Need, Importance and as a Measure of Competitive Advantage, service Quality Dimensions, Service Quality Measurement and Service Mapping, Improving Service Quality and Service Delivery, Service Failure and Recovery

### Unit VIII – Customer Defined Service Standards: Introduction, Customer Defined Service Standards- Hard and Soft, Concept of Service Leadership and Service Vision, Meeting Customer Defined Service Standards, Service Flexibility Versus Standards, Evaluate Strategies to Match Capacity and Demand, Managing demand, Managing supply, managing Demand and Supply of Service – Lack of Inventory Capability, applications of Waiting Line and Queuing Theories to Understand Pattern Demand

### Unit IX – Integrated Services Marketing: Introduction, meaning and Importance, Features of Integrated Service Marketing, Integrated Marketing Communication for Service, Reasons for growing importance of integrated marketing communication, Advantages of integrated marketing communication, Integrated Service Marketing Mix, Developing an effective and efficient service marketing system, Integration of service quality measures and managing quality

### Unit X – Marketing of Services: Introduction, Overview of Different Service Sectors, Marketing of Banking Services, Marketing in Insurance Sector, Marketing of Education Services, Marketing of Tourism and Airlines, Tourism marketing, Airlines marketing, marketing of Hospitality Services, Healthcare Marketing, Social Service by NGOs, Marketing of Online Services, Marketing of Professional Services

### Unit XI – Emerging Issues in Service Marketing: Introduction, Strategic approach in Services Marketing, Service Marketing in e-Commerce and e-Marketing, and Telemarketing Services,
Service Marketing Research for Global Markets and Rural Markets, Innovations in Services Marketing, Ethical Aspects in Service Marketing

Unit XII – Customer Relationship Management: Introduction, Meaning and Definition of CRM, Importance of CRM, Concept and Growth of Relationship Marketing, Scope of Relationship Marketing, concept of Lifetime Customer and Customer Loyalty, Benefits and difficulties of CRM


Textbook: Services Marketing, R. Nargundkar, Tata Mcgraw Hill
Reference Book: Services Marketing, H. L. Christopher, W. Jochen, Pearson

Course Code- D MKT402 ADVERTISING MANAGEMENT AND SALES PROMOTION

Learning objectives:
- Identify and respond to clients’ advertising and marketing communications objectives by applying principles of marketing and communications
- Perform a market segmentation analysis, identify the organization's target market/audience and define the consumer behaviour of each segment
- Contribute to evaluating the effectiveness of advertising and marketing communications initiatives

Unit I – Overview of Advertising Management: Introduction, Meaning and Framework of Advertising, Defining Advertising, Advertising to Persuade the Buyer, Importance of Advertising in Marketing, Role of Advertising in Marketing Mix and Positioning, Advertisers and Advertising Agencies, Choosing an Advertising Agency

Unit II – The exciting world of Indian Advertising: Introduction, Emerging Areas of Growth, Shifting patterns of consumption, Factors that Affect Marketing and Advertising

Unit III – Structure of an Advertising Agency: Introduction, Overview of an Advertising Agency, Departments of an Advertising Agency, Creative department, Media department, Client
servicing department, Marketing research department, Ancillary Services, Interfacing with Client’s Organisation, Integration of Services

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<tbody>
<tr>
<td>Unit V – Understanding Persuasive Messages: Introduction, Communication Response Hierarchy, Securing Attention, Interpretation and Processing of Information, Persuasion, Attitude Change, Factors that influence or change attitudes, Theories of Advertising</td>
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<tr>
<td>Unit VI – Advertising Copy and Design strategy: Introduction, Advertising Copy, Types of advertising copy, Creativity in Advertising, Copy Testing Methods, Visual Strategies, Art department specialists, Developing a layout, The role of synergy</td>
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<tr>
<td>Unit VII – Media Planning: Introduction, Media Objectives, Media Options, Measuring Media Audiences, Determining Media Weight, Media Schedule Decisions, Space and Time Buying, Cost Considerations, The Role of a Media Planner and a Media Buyer, Media Trends</td>
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<td>Unit VIII – Advertising Budgets: Introduction, Factors Influencing Budget Setting, Typical Spending Patterns, Common Budgeting Approaches, Budgeting Methods, Decision Support System (DSS), Structure of DSS, Allocating the Marketing Communication Budget</td>
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<tr>
<td>Unit X – Emerging Consumer Segments Introduction, evolving Consumer segments, the sunshine economy and Generation Me, Confident youth, Brat power, Assertive working women, DINK family, Metrosexual, Elderly population</td>
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<tr>
<td>Unit XII – Ethics in Advertising: Introduction, Perceived Role of Advertising, The Advertising Standards Council of India (ASCI), Forms of Ethical Violations, Misleading advertising, Advertising to children, Product endorsements, Stereotyping, Cultural, religious and racial sensitivity in advertising, Obscenity in advertising</td>
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<tr>
<td>Unit XIV – Sales Promotion: Introduction, Meaning and Importance of Sales Promotion, Strengths and Limitations of Sales Promotion, Difference between Sales Promotion and Advertising, Tools and Techniques of Consumer Sales Promotion, Trade Promotions, Organising Sales Promotion Campaigns</td>
<td></td>
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</tbody>
</table>
Textbook: Advertising and Promotion, Belch, George, Belch, A. Michael, Poorani, Keyoor, McGraw Hill Education


Course Code- DMKT403  E - MARKETING

Learning objectives:
- Explain the importance of e-marketing and illustrate the use of search engine marketing, online advertising and online marketing strategies
- Formulate an integrated and comprehensive e-marketing plan
- Review and prioritize the strategic options for boosting customer acquisition, conversion, and retention using digital marketing


Unit III – E-Customers: Introduction, Objectives, Definition of E-Customers, Dealing with Customers’ Motivations and Expectations, Fears and Phobias of Online Customers, Online Buying Process

Unit IV – Types of E-Market: Introduction, Objectives, Definition of E-market, E-Malls, E-Storefront, E-Marketplace


Unit VII – E-Marketing Mix Strategy: Introduction, Objectives, the 4Ps in E-Marketing, Additional 3Ps in E-Marketing of Services, the 2P+2C+3S Formula in E-Marketing


| Unit X – Methods and Techniques of E-Marketing I: Introduction, Objectives, Advertising Techniques, Selling Methods, Sales Promotion, Public Relations |

| Unit XI – Methods and Techniques of E-Marketing II: Introduction, Objectives, Sponsorship Techniques, Direct Marketing Techniques, Merchandising Techniques, Online Seminar Techniques, Word-of-Mouth Marketing Techniques |


| Unit XIII – E-Customer Relationship Management: Introduction, Objectives, Concept of E-CRM, Prerequisites for the Implementation of E-CRM, Transition from CRM to E-CRM, E-CRM and Community Building, E-CRM and Customer Lifecycle, E-CRM versus E-Loyalty, Conversion Optimization |


**Textbook:**
E-commerce, K. C. Laudon, C. G. Traver, Pearson

**Reference Book:**
Failing to Succeed: The Story of First Indian e-Commerce Company, K. Vaitheesewaran, Rupa Publications India

| Course Code- DMKT404 | INTERNATIONAL MARKETING |

**Learning objectives:**
- To develop an understanding of major issues related to international marketing
- To develop skills in researching and analysing trends in global markets and in modern marketing practice
- To be able to analyse an organization’s ability to enter and compete in international markets

| Unit I – Introduction to International Marketing: Introduction, Scope of International Marketing, International Marketing vs. Domestic Marketing, Principles of International Marketing, Customer value and the value equation, Competitive or differential advantage, Management Orientations, MNCs and TNCs, Benefits of international marketing |

<p>| Unit II – International Marketing Environment: Introduction, Political Environment, Political systems, legal and Regulatory Environment, Socio-cultural Environment, Economic Environment, Technological Environment, Challenges in Global Marketing |</p>
<table>
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<tr>
<th>Unit III – International Trade Environment: Introduction, classical trade theories, modern trade theories, trade barriers, quotas, Implications of Tariffs, Types of Agreements, General Agreement on Tariffs and Trade (GATT), Functions and Objectives of WTO, Implication of WTO on International Marketing, India’s Role in International Trade Theories</th>
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<tbody>
<tr>
<td>Unit IV – International Market Entry Strategies: Introduction, Different Entry Modes and Market Entry Strategies, joint Ventures, Strategic Alliances, Direct Investment, Manufacturing and Franchising</td>
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<td>Unit V – International Marketing Research: Introduction, Concept of Marketing Research, Need for Marketing Research, Approach to Marketing Research, Scope of International Marketing Research, International Marketing Research Process, market surveys, marketing information system</td>
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<tr>
<td>Unit IX – International Promotional Strategies: Introduction, Communications Process, principles of communication, Status of Promotion, Promotion Appeals, Media Selection, Personal Selling, Public Relations and Publicity, Sales Promotion, advertising, e-marketing</td>
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<td>Unit XI – Export Marketing Documentation: Introduction, Significance of export documentation, the statutory control, declaration forms, disposal of export documentation form, major documents</td>
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<tr>
<td>Unit XII – Foreign Trade Policy: Introduction, export Promotion Capital Goods Scheme, Duty Exemption/Remission Schemes, gem and Jewellery Promotion Scheme, Diamond import licence, Special Economic Zones (SEZS), Free Trade Warehousing Zones (FTWZ), Star Export Houses, Deemed exports, Agri Export Zones, Target Plus Scheme</td>
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<tr>
<td>Unit XIII – Foreign Exchange and Foreign Currency: Introduction, the Foreign Exchange Market, Organisation of the foreign exchange market, Exchange Rate Policy and Management, Triangular Arbitrage, Future and Forward Market, Foreign Currency Options, Forecasting Foreign Exchange Rates</td>
</tr>
</tbody>
</table>

Textbook:
International Business: Text and Cases, F. Cherunilam, Prentice Hall India
Reference Book:
International Business, K. Aswathappa, Tata McGraw Hill

HUMAN RESOURCE ELECTIVES

<table>
<thead>
<tr>
<th>Course Code- DHRM401</th>
<th>COMPENSATION AND BENEFITS</th>
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Learning objectives:
- Recognize how pay decisions help the organization achieve a competitive advantage
- Identify the internal and external environmental factors that have an impact on the pay structure of an organization
- Analyze, integrate, and apply the knowledge to solve compensation related problems in organizations
- Demonstrate comprehension by constructing a compensation system
- Design rational and contemporary compensation systems for modern organizations


Unit II – Job Evaluation, Grading and Compensation Structure: Concept of Salary Structure, Salary Progression, Methods of Payment, Limitations of Job-Related Compensation, Competency based Compensation (Broad pay bands and 360-degree feedback)


Unit V – Incentive Schemes: Pay for Performance: Types of Incentive Schemes, Wage Incentive Plans, Pre-requisites of Effective Incentive Schemes, Merits and Demerits of Incentives, Pay for Performance Plans

Unit VI – Benefits and Services: Concept and Nature of Benefits, Classification of Employee
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<tr>
<th>Unit VII</th>
<th>Tax Planning: Concept of Tax Planning, Role of Tax Planning in Compensation Benefits, Tax-efficient Compensation Package, Tax Implications of Employee Compensation Package to Employer, Fixation of Tax Liability, Salary Restructuring, Recent Trends in Taxation</th>
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<tr>
<td>Unit VIII</td>
<td>Voluntary Retirement Scheme: Concept of Voluntary Retirement Scheme (VRS), Approaches to Deal with Workforce Redundancy, Costs and Benefits to the Company, VRS for Public Sector Employees, The Worker Adjustment and Retraining Notification Act (WARN)</td>
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<tr>
<td>Unit X</td>
<td>Managerial Remuneration: Managerial Remuneration – Concept and Elements, Executive Compensation: Methodology, CEO-to-worker pay ratio, Rewarding – A New Approach, Remuneration Ceilings, Remuneration Ceilings under Section XIII, Benchmark Compensation Package as per the Industry Standards</td>
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<td>Unit XI</td>
<td>Performance Linked Compensation: Performance management, Performance Appraisal and Measurement, Pay for Performance Plans, Balancing of Internal and External Equity</td>
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<td>Unit XII</td>
<td>Pay Structures: Performance Based and Pay Based Structures, Designing Pay Structures, Comparison in Evaluation of Different Types of Pay Structures, Designing Pay Ranges and Bands, Significance of Factors Affecting Pay Levels</td>
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<td>Unit XV</td>
<td>International Compensation: Expatriate Compensation and its Objectives, Elements of Expatriate’s Compensation Package, Problems in Compensation Management</td>
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</tbody>
</table>

**Textbook:**

Compensation & Benefits, Dipak Kumar Bhattacharyya, Oxford University Press

**Reference Book:**

Course Code- DHRM402  PERFORMANCE MANAGEMENT AND APPRAISAL

Learning objectives:

- Design an organization’s performance management process that is compliant with law, and supports organizational mission and strategy
- Compare and contrast various organizational performance management programs and best practices and define attributes of effective performance management systems
- Employ job-related performance standards and performance indicators that reflect the employees’ range of responsibilities
- Assess how increased employee involvement can contribute to effective performance and coach employees to identify career paths and resources available to support individual development
- Identify and communicate appropriate actions with employees (e.g. training and development, wage increase, promotion, bonus etc.) based on their performance strengths and weaknesses


Unit V – Performance Management Planning and Development: Introduction, Performance Management Planning, the Planning Process, Performance Agreement, Drawing up the Plan, Evaluating the Performance Planning Process


Unit VII – Performance Appraisal: Definitions and Dimensions of PA, Purpose of PA and Arguments against PA, Necessity of Performance Appraisal and its Usage by Organisations, Characteristics of Performance Appraisal, Performance Appraisal Process, Mistakes made by
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<tr>
<th>Unit VIII – Performance Appraisal Methods: Performance Appraisal Methods, Traditional Methods, Modern Methods, and Performance Appraisal of Bureaucrats – A New Approach</th>
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<tr>
<td>Unit X – 360-Degree Appraisal: Introduction, the Impact of 360-Degree Feedback on Organisations, Concept of 360-Degree Feedback System, Purpose, Methodology, Ratings, Advantages and Disadvantages of the Method, The Process of 360-Degree Feedback, Operating 360-Degree Appraisal</td>
</tr>
</tbody>
</table>

**Textbook:**
Performance Management & Appraisal, Dipak Kumar Bhattacharya, Pearson

**Reference Book:**
Performance Management, A S Kohli and T Deb, Oxford University Press

**Course Code- DHRM403**  | TALENT MANAGEMENT AND EMPLOYEE RETENTION
---|---

**Learning objectives:**
- Understand talent management and link between talent management and other HR practices
- Examine the process for identifying high potential talent and developing a pipeline of talent to serve organizational present and future needs
- Examine the processes for talent development and succession planning
Discuss the unique challenges and opportunities of talent management resulting from globalization

Examine the role of leadership related to talent management

Evaluate the quality of a talent management program


Unit II – Building Blocks for Talent Management: Introduction, Effective Talent Management System, Building Blocks of Effective Talent Management System


Unit VIII – Talent Acquisition: Introduction, Talent Acquisition, Recruiting Process, Strategic Trends in Talent Acquisition, Talent acquisition management solutions

Unit IX – Talent Engagement and Retention: Introduction, Concept of Talent Engagement, Retention, Employee Engagement and Retention, the Race for Talent: Retaining and Engaging Workers, Best Practices for Talent Engagement, Improving Employee Retention


Unit XI – Role of HR in Talent Management: Introduction, Overview of Human Resource Management, and Role of HR in Talent Management, Role of the HR Manager


Textbook:
Talent Management & Employee Retention, Lance A. Berger and Dorothy R. Berger, Tata McGraw Hill

Reference Book:
Global Talent Management, Sonal Minocha, Dean Hristov, SAGE

Course Code- DHRM404

CHANGE MANAGEMENT

Learning objectives:
- Gain an appreciation for the impact of change management on organizational results
- Understand foundational aspects of change management and the critical role managers play in the change process
- Learn a practical framework for processing the many changes that impact managers
- Create action plans to move employees past barrier points and on to desired outcomes

Unit I – Organisational Change Management: Understanding Organizational Transformation, Transformation Strategies, Process of Organizational Transformation, Nature of Organizational Change, Perspectives of Organizational Change

Unit II – Models of Organizational Change: Process-based Change Models, Content-based Change Models, Individual Change Models, Integration of Change Models

Unit III – Communicating Change: Need for Communicating Change, Factors Involved in Communicating Change, Methods and Techniques for Communicating Change, Role of Top Management in Communicating Change


Unit V – Resistance to Change: Concept of Resistance to Change, Forms of Resistance, Reactions to Change, Resistance to Organizational Change Initiatives, Overcoming the Resistance to Change, Techniques to Overcome Resistance

Unit VI – Implementing Change: Implementation of Change, the Delta Technique, Developing
an Implementation Plan, Gaining Support and Involvement of Key People, Developing Enabling Organizational Structures, Celebrating Milestones


Unit VIII – Leading Changes: Visionary Leadership, Leadership Framework, Creating Shared Vision, Role of Leaders in the Phases of Organizational Change

Unit IX – Maintaining Organizational Effectiveness: Meaning of Organizational Effectiveness, Difference between Effectiveness and Efficiency, Approaches to Organizational Effectiveness, Perspectives of Organizational Effectiveness, Factors in Achieving Organizational Effectiveness


Unit XI – Change Agents: Meaning and Concept of Change Agents, Types of Change Agents, Role and Competencies of a Change Agent, Change Agent Styles, Areas that Change Agents can change

Unit XII – Culture and Change: Introduction, Concept of Organizational Culture, Dimensions of Culture, Type of Culture, Assessing Organizational Culture, Role of Culture in Managing Change

Unit XIII – Individual Change: Need for Individual Change, Personality and Change, Learning and Individual Change, Approaches to Individual Change, Implications of Change in Individuals

Unit XIV – Organizational Learning and Learning Organization: Concept of Organizational Learning, Process of Organizational Learning, Types of Organizational Learning, Disciplines Practiced in Organizational Learning, Concept of Learning Organizations, Individual Skill Sets in Learning Organizations

Textbook:
Change Management, James McCalman, Professor Robert A Paton & Sabina Siebert, SAGE

Reference Book:
Change Management, Derek S Pugh, David Mayle, SAGE

ANALYTICS AND DATA SCIENCE ELECTIVES.

<table>
<thead>
<tr>
<th>Course Code- DADS401</th>
<th>Advanced Machine Learning</th>
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Learning objectives:
Fit Time-Series Data using ARIMA model
Describe some applications of Deep Learning
Use Image Recognition techniques in Deep Learning
Describe Reinforcement Learning

Unit 1 – Introduction Time-Series: What is Time Series, Forecasting Time-Series

Unit 2 – Stationary Process and ARIMA Models: Stationary Time Series, Non-Stationary Time Series, Auto Regressive Models, ARIMA models

Unit 3 – Exponential Smoothing Models: What are Smoothing Techniques, Exponential Smoothing Techniques

Unit 4 – ARCH/GARCH Models: How to deal with Non-Stationary Data, ARCH Models, GARCH Models

Unit 5 – Introduction to AI: What is Artificial Intelligence, Why AI is useful

Unit 6 – Application of AI: Application of AI in Business Analytics, Application of AI in Medical Sciences, Application of AI in Industry

Unit 7 – Introduction to Deep Learning: What is Deep Learning, Deep Learning Applications

Unit 8 – Artificial Neural Networks: What are Neural Networks, Understanding MLPN, FFN and BPN

Unit 9 – Convolutional Neural Networks, what is CNN? Understanding CNN, Implementing CNN in R

Unit 10 – Some DL Applications: Recurrent Neural Networks, Long Short-Term Memory Networks, Auto-Encoders

Unit 11 – Reinforcement Learning: What is Reinforcement Learning, Reinforcement Learning Application using R

Unit 12 - Image Recognition using Deep Learning: Working with Image, Image Classification using R

Unit 13 – Case Study on Time Series: Fitting ARIMA models in Time-Series Data

Unit 14 – Case Study on Reinforcement Learning: Reinforcement Learning Application in R

Unit 15 – Case Study on Neural Networks: Application of Neural Networks using R

Reference Book

1. The Analysis of Time Series – an Introduction by Chris Chatfield, Chapman & Hall/CRC
2. Time Series Analysis: Forecast and Control by Box and Jenkins
Course Code- DADS402  |  Unstructured Data Analysis

Learning objectives:

- Describe how to analyse unstructured data
- Create word cloud
- Perform sentiment analysis
- Use Machine Learning techniques to detect fake news

Unit 1 – Introduction to Unstructured Data: What is unstructured data, Difference between structured and unstructured data, Analysing unstructured data

Unit 2 – Feature Extraction in Unstructured Data: Textual Data, Pictorial Data

Unit 3 – Word Cloud Creation: What is Word Cloud, Creation of Word Cloud using R

Unit 4 – Text Classification: Pre-processing the Data for Text Classification, Classification using different classifier Models

Unit 5 – Sentiment Analysis: Different Sentiment Analysis Models, Performing Sentiment Analysis using R


Unit 7 – Introduction to NoSQL Database: Difference between SQL and NoSQL Database, Types of NoSQL Databases, How NoSQL Databases work

Unit 8 – Performing basic operations in NoSQL Database, Introduction to MongoDB Working with MongoDB

Unit 9 – Working with Audio Data: What is Audio Data? How to work with Audio Data?

Unit 10 – Audio Data Classification: Pre-processing Audio Data, Audio Data Classification

Unit 11 – Working with Image: What is Image Data, Pre-processing Image Data

Unit 12 – Image Data Classification: How to classify Image Data? Different Algorithms for Image Data Classification

Unit 13 – Introduction to Video Classification: How to work with Video Data, Video Data Classification Techniques

Unit 14 – Fake News Prediction – Case: Fake News Classification Data Import, Processing Fake News Data, Classifying Fake News

Unit 15 – Case Study on Audio Data Classification: Birds’ Sound Data Classification
**Reference Book**

1. Tan, Steinbach and Kumar, “Introduction to Data Mining”
2. Camastra and Vinciarelli “Machine Learning for Audio, Video and Image Analysis”

<table>
<thead>
<tr>
<th>Course Code- DADS403</th>
<th>Business Analytics</th>
</tr>
</thead>
</table>

**Learning objectives:**
- Perform Conjoint Analysis for designing optimum products
- Create Credit Risk Models
- Describe different techniques in digital marketing
- Describe what is Robotic Process Automation

Unit 1 – Using Analytics in Business: What is Analytics, Use of Analytics in different Business Domains

Unit 2 – Conjoint Analysis: What is Conjoint Analysis, Use of Conjoint Analysis, How is it done using R

Unit 3 – Campaign Analytics: How Campaign Success is Measured, TRP and GRP, Trend and Adstock Effect, Modelling Campaign Effectiveness

Unit 4 – Multi-dimensional Scaling: What is MDS, Performing MDS using R

Unit 5 – Perceptual Maps: What is Perceptual Map, Creating Perceptual Maps using R

Unit 6 – Credit Risk Modelling: What is Credit Risk, Different Credit Risk Models, Credit Risk Modelling using R

Unit 7 – Customer Propensity Modelling: What is Propensity Model, Different Types of Propensity Models

Unit 8 – Advanced Propensity Models: Creating Propensity Models using R, Using Neural Networks in Propensity Models

Unit 9 – Price Optimization: Price Elasticity of Demand, Modelling Price Demand Curve, Optimizing Price

Unit 10 – Digital Marketing Analytics: General Marketing Vs Digital Marketing, Different Digital Marketing Techniques

Unit 11 – Attribution Models: Attribution Modelling, A/B testing

Unit 12 – Introduction Robotic Process Automation: What is RPA, Business Benefits of RPA, Features and Capabilities needed for RPA

Unit 13 – RPC Concepts and Implementation Approach: Different Approaches of RPA, 5-Step Implementation Approach of RPA

Unit 14 – Employee Attrition Analysis – Case: IBM Employee Attrition Data Analysis using R
Reference Book
1. Marketing Models (Kotler, Lilien, Moorthy)

Course Code- DADS404

Data Scraping

Learning objectives:
• Scrap Data from different websites
• Use ‘DPLYR’ function for scrapped data analysis
• Detect and Improve Data Quality after scrapping

Unit 1 – Introduction to Data Scraping and Wrangling: What is Data Scraping, Tools used for Data Scraping
Unit 2 – Finding Data Across Sources: How Data Scraping is done, Scrapping Data from Different Sources
Unit 3 – Manual Scrapping: How Manual Scrapping is done, Data Scrapping Using R
Unit 4 – Scrappping Data from Wikipedia: How to Scrap Wikipedia Data, Scrappping Data using R
Unit 5 – Scrappping Amazon Feedbacks: Amazon Feedbacks, Scrappping Amazon Feedbacks Data
Unit 6 – Scrappping from Naukri: Scrappping Data from Naukri, Putting Data into file after Scrappping
Unit 7 – API-based Scrappping: What is API-based Scrappping, Use of API-based Scrappping
Unit 8 – Scrappping from Twitter: Use of Standard R library to scrap from Twitter, Scrappping Tweets and Users using R
Unit 9 – Scrappping Crypto-currency Data: Cryptocurrency Data Scrappping using R, Putting Cryptocurrency Data in Standard Format
Unit 10 – Basics of Data Wrangling: What is Data Wrangling, How Data Wrangling is Done
Unit 11 – Data Quality Detection: What is Data Quality, Understanding Data Quality, Improving Data Quality
Unit 12 – ‘DPLYR’ function: Uses of ‘DPLYR’ function in R, How to improve data quality using ‘DPLYR’ function
Unit 13 – Scrappping Feedback Data: Scrappping Feedback Data from Different Sources, Presenting Scrappped Data in Proper Format

Unit 15 – Salary Prediction – Case: Salary Prediction Data Analysis using R
Reference Book


RETAIL MANAGEMENT ELECTIVES

<table>
<thead>
<tr>
<th>Course Code- DRMM401</th>
<th>International Retailing</th>
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Learning objectives:
- Explain the concepts in international retail business with respect to foreign trade/international business
- Apply the current business phenomenon and to evaluate the global business environment in terms of retail practices
- Analyse the principle of international business and strategies adopted by firms to expand globally
- Integrate concept in international business concepts with functioning of global trade

Unit 1-New Ventures in Retail: Basic concept of retailing – retail development – types of retailers – multi channel retailing – organized retailing in India – services retailing

Unit 2- The Evolution of Retail Formats: The Evolution of Retail formats – Theories of retail development-Environmental, Cyclical and Conflict Theory-The Concept of life cycle in Retail-Innovation, accelerative growth- Maturity Decline-Phares of growth in retail markets-Business models in retail-Classification based on ownership /Merchandise offered/Franchising /Non Store Retailing/Direct selling/Direct response marketing/Telemarketing/Fairs and Road Shows/Event Management/Automated Vending/kiosks/ The Cash & Carry/credit Marketing/Brand Management


Unit 4-International Retailing: International Retailing- Alternative conceptions of international retailing, definitions, interpretations and classification- Trends in the internationalization of retailing and evolution of international retailing - Motives for international retailing

Unit 5-International Retailing Strategy: The changing nature of boundaries – International- Where retailers internationalize, assessing the potential of retail markets - Methods of international retailing
retailing, accessing retail markets, the form of entry, joint ventures, franchising, acquisition etc. marketing planning for differing international and regional requirements-Why retailers internationalize


Unit 8-Retailing Practices: Case Study (Asia): 1. Ito - Yokada (Japan) 2. Lianhua (China) 3. Big Bazar (India) 4. Reliance (India) 4. Big Bazaar

Unit 9-Multibrand Retailing: Concept and Definition of Multi Brand Retail –History of FDI in Single Brand retail in India-History of FDI in Multi Brand Retail in India-The pros and cons of allowing FDI in Single Brand retail in India-The pros and cons of allowing FDI in Multi Brand Retail in India- Government of India Policy on FDI in Single Brand Retail and FDI in Multibrand retail.

Unit 10-Consumer Behaviour in Services: Distinctive characteristics service operations-Service Bench Marking-Service strategy - Designing the service enterprise – Service Quality-Service facility location-Managing service operations-Service-Supply relationships vehicle routing

Unit 11-Customer Engagement Management: Customer Relationship Management. Retail Selling Skills: Pre-Check, Opening the Sale, Probing, Demonstration, Trial, Close Handling Objections, Closing, Confirmations & Invitations. Retail Management Information Systems, Legal and Ethical Issues in Retailing

Unit 12-Experiential Retailing: Competing in Foreign Markets- Why Companies Expand into Foreign Markets- Cross- Country Differences in Cultural, Demographic and Market Conditions- Concept of Multi country Competition and Global Competition- Strategy Options for Entering and Competing in Foreign Markets- Quest for competitive Advantage in Foreign Markets-Profit Sanctuaries, Cross market Subsidization and Global; Strategic Offensives- Strategic Alliances and Joint Ventures with Foreign partners.-Competing in Emerging Foreign Markets-Cross Border Strategic Alliances

Reference Book

4. Margaret Bruce, Chistopher Moore, Grete Birtwistle International Retail Marketing: A Case Study Approach
5. Allan M Findlay, Ronan Paddision and John A Dawson Retailing Environments in Developing Countries- Rutledge

**Course Code- DRMM402**

**Entrepreneurship in Retail Business**

**Learning objectives:**
- Understand the implementation issues including financial, legal, operational and administrative procedures involved in starting new business ventures
- Analyze the feasibility of a new venture business concept
- Examine and analyze issues related to legal aspects of retail business
- Apply the entrepreneurial process in real market setting

**Unit 1-Basics of Entrepreneurship:** Entrepreneurship: Importance, Characteristics and Qualities of Entrepreneurship; Entrepreneurial; Role of Entrepreneurship, Ethics and Social Responsibilities.

**Unit 2-Role of Government:** Role of Government; Role of IDBI, NIESBUD, SISI, DIC Financial Institutions Commercial Banks, Entrepreneurial Development Institutes, Universities and other Educational Institutions Offering Entrepreneurial Development Programme

**Unit 3-Training:** Human Resources: Retail organization- Laws involved in HR.- Motivation-Customer Psychology-Training needs for employee-Top Grading-Obstacles to Top grading-Astronomical Costs of Mis- Hires- Company killers and Company Derailers- recruitment Best Practices- How to Avoid Mis Hires- CIDS (Chronological In-Depth Structure) based Model – Coaching to fix weakness-Interview’s guide- Avoiding Legal Problems: Bulletproof Approach

**Unit 4-Women Entrepreneurship:** Role & Importance, Profile Women Entrepreneur, Problems of Women Entrepreneurs, Women Entrepreneurship Development in India.

**Unit 5-Creativity and Entrepreneurship Management:** Creativity and Entrepreneurship Sources and Methods of Ideas Planning and Development of Programmes E-Business Ventures; New Venture Management.

**Unit 6-Legal Aspects of Retail Business:** Legal Issues and Best Practice-Data Protection and Privacy, electronic communications and the Indian Directive, self-regulation and codes of practice-
pitfalls and opportunities of international direct and interactive marketing- consumer and technological landscape of the future- Emerging Trends in Network Marketing- B2B, C2C, Planning, scheduling, negotiating and buying media on and offline- Core marketing technology components; data warehousing

Unit 7- Developing Business Idea: business intelligence appliances, campaign management applications, sales force automation, customer interaction and contact centre applications, Data fusion- Network Marketing

Unit 8- Critical Aspects in Retail Entrepreneurship: Success Stories India, MLM


Unit 10- Rural Retailing & Social Marketing: Rural Marketing of FMCG’s: Indian FMCG industry, characteristics of Indian FMCG sector, Challenges in the FMCG industry, Rural Marketing of FMCG’s: Select case studies Rural Marketing of Consumer durables: Issues related to consumer durables in the rural market, Rural Marketing of Consumer durables


Unit 12-Retail Marketing Environment: Components of modern marketing information system, analysing the retail marketing environment- Micro and Macro, Demand forecasting – need and techniques

Unit 13- Agripreneurship and Social Entrepreneurship: Meaning of Agripreneurship, Social entrepreneurship: Meaning and Cases


Unit 15- Case study: Case Study ITC, HUL

Reference Book

3. Entrepreneurship Development New Venture Creation – Satish Taneja, S.L.Gupta
Learning objectives:

- Describe and understand the theories, concepts, processes, and procedures of rural retail management
- Demonstrate how retail theory and concepts are applied in the rural retail sector
- Develop the ability to integrate and apply various theories and concepts to critically evaluate a rural retail business
- Develop the ability to design and implement strategies for a rural retail business.

Unit 1 - Agro-industries: Types of enterprises in agriculture, Problems of Agripreneur; Production Systems - production, marketing and economics of Horticulture, Floriculture, medicinal plants, Mushroom cultivation, Vermiculture, sericulture and Organic farming; Rainwater Harvesting, Plant Tissue Culture; Production Function and its types, technical change and agricultural productivity, Farm budgeting and cost concepts; Steps in setting up Agro based industries

Unit 2 - Farmer Producer Organization: Concept of Farmer producer organisation (FPO), FPO Marketing – Features & objectives of FPO, Problems of FPO in Marketing. Visit an FPO study marketing plan

Unit 3 - Agri Business Management: Functions of Agri business management, Functional management of Agri business, Agri business economics; Agricultural Input - agricultural input supply sector and main agricultural inputs; Information Management, Risk Management, Human Resource management; Management of Farm Resources; Reasons of failure of Agri business. Prepare an agribusiness plan with your own idea.


Unit 5 - Packaging and Quality Control: Product Packaging, Quality systems and control, Packaging decisions and strategies

Unit 6 - Agricultural Marketing and Pricing: Rural Marketing: introduction, Rural consumer: Age and stage of lifecycle, lifestyle, rise of consumerism, opinion leadership. Rural market environment: Occupation, Income generation, spending patterns, infrastructure, Characteristics of rural marketing, STDP (Segmentation: Demographic, Geographic, behaviourul, Psychographic, occupational. Targeting, Differentiation, and Positioning) for rural market, Rural Marketing mix, Rural retailing-ITC E-Choupal, Project Shakti, Marketing of services. Problems in Rural Marketing. Study any product which is rural innovation and give its marketing plan
<table>
<thead>
<tr>
<th>Course Code- DRMM404</th>
<th>Retail Marketing Environment</th>
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**Learning objectives:**
- Understand the general concepts of retail
- Understand how a retail marketing strategy is developed
- Explain the technologies used in E-commerce
- Evaluate the use of E-tailing and online marketing in contemporary scenario

| Unit 1 - Retail Marketing Basics: Marketing: Retailing, Role, Relevance & Trends. | - Retail Customer
Retail market segmentation & franchising- Relationship marketing in Retailing |
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<tbody>
<tr>
<td>Unit 2 - Retail Marketing Challenges And Opportunity: Retailing in banking and other financial services, mutual funds and Insurance- Quantitative methods in marketing.</td>
<td>- Social Marketing in Retail management Strategic management: Retail in India.</td>
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<td>- Services marketing and management.</td>
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<td>- Brand Management- International / Strategies- Pricing - Advertising &amp; sales promotion</td>
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<td>Unit 3-Retail Consumer Behaviour: Consumer decision making process; Models of consumer decision making (HowardSeth, Angel, Kollot and Blackwell, Nicosia models); Organizational consumer behavior; Post purchase behavior.</td>
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<tr>
<td>Unit 4- Retail Marketing Mix Strategies: Marketing mix for retail</td>
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<td>Unit 5-Emerging Issues in Marketing: Direct Marketing - E-Communications- Creating Print Advertising- Managing a Lead-Generation Program- Modeling for Business Decision Support</td>
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<td>Unit 6- Direct Marketing: The Scope of Direct Marketing- Business, Strategic and Direct Marketing Planning- The Impact of Databases- Consumer and Business Mailing Lists- The OfferMagazines- Newspapers- TV/Radio- Telemarketing/Tele Services- Overview of Internet</td>
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<tr>
<td>Unit 7-Digital Marketing: Modern integrated DM &amp; interactive marketing - important role in marketing strategy - build and develop brands - customer acquisition, development and retention</td>
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<td>Key principles of targeting, interaction, control and continuity- Three different business models - stand alone, integrated and support Catalysts of change in modern marketing</td>
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<td>Unit 8-Network marketing: From distance selling to interactive marketing - Managing relationships across channels and media - The direct and interactive marketers' information system- Data-driven marketing planning</td>
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<tr>
<td>Unit 9-E commerce: E-Commerce Technologies: Internet &amp; WWW; Internet Protocols – OSI Model, TCP/IP, TCP, UDP, IP, DNS, FTP, SLIP, PPP; Multimedia technology – ISDN, ATM, Cell relay, desktop Video Conferencing</td>
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<tr>
<td>Unit 10-Technologies used in E-commerce: Information Publishing Technology - HTML, URL, HTTP, HTML FORM</td>
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<tr>
<td>Unit 13-Online Business Transactions: Electronic Data Inter-change: Introduction, Concepts of EDI and Limitation, Applications of EDI, Disadvantages of EDI, EDI model</td>
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</table>
Unit 14-Online Marketing: Concept of E- Marketing, 4Ps of E-Marketing, Traditional Marketing v/s E-Marketing, Advantages of E-Marketing, Status of E-Marketing in India


Reference Book

1. Logistics and Retail Management: Emerging Issues and New Challenges in the Retail Supply Chain, 3rd Edition 305 Pages · 2009 · by John Fernie & Leigh Sparks
2. Retail Branding and Store Loyalty: Analysis in the Context of Reciprocity, Store Accessibility, and Retail Formats 197 Pages · 2014 · by Bettina Berg
6. Bert Rosenbloom, Retail Marketing, Random House
7. Bert Rosenbloom, Marketing Functions and the whole sale distribution, distribution rosenbloom and Education Foundation, U.S.

BANKING, FINANCIAL SERVICES & INSURANCE ELECTIVES

Course Code- DBFI401 ALM & Treasury Management

Learning objectives:

- To analyse the significance and techniques of ALM.
- To analyse the Structure, scope, role and significance of treasury management.
- To be able to describe the best and latest treasury management products and practices.
- To be able to implement the hedging techniques for various types of risk.

Unit 1-ALM: An Overview, Functions, Advantages, Strategic ALM.

Unit 2-Treasury Management: An Overview, Organisation, Importance, Functions. ALM & Treasury management.

Unit 3-Banking Business: Introduction, Nature & Scope, Operations and special transactions

Unit 4-Regulatory Aspects of Banking: Regulatory aspects, Capital Adequacy, Ratios, Asset Classifications.

Unit 6- ALM tools and techniques: Basic Concepts, Risks: Liquidity, Interest Rates, Currency, Portfolio & Securitization. Developments in ALM.

Unit 7- ALM tools and techniques: Basic Concepts, Risks: Liquidity, Interest Rates, Currency, Portfolio & Securitization. Developments in ALM.


Unit 9- Financing: Debt Management, Equity Management, Investment Management.

Unit 10- Strategic Treasury Management: Overview, Role, Treasury management Practices.

Unit 11- Risk Management I: Foreign Exchange Risk Management


Unit 13- Managing Treasury Function: Decentralisation, Performance management, Internal Control


Reference Book

4. RBI relevant notifications and circulars.
5. SEBI relevant notifications and circulars.

Course Code- DBFI402 | BASEL EGUATIONS & RISK MANAGEMENT IN BANKING

Learning objectives:

- Understand and analyse various types of risks associated with banking and the relationship between risk and capital.
- Understand role of Basel in Bank Risk Management & ongoing enhancements brought about in Basel III.
- Understand and learn regulations and other tools to manage these risks

Unit I: Risk and Risk Management: Risk definition, Types of Risks-Credit risk, operational risk and market risk

Unit II: Asset-Liability Management (ALM): Concept, Organisation and, Techniques
Unit III: Credit Risk Management: Introduction, Capital adequacy norms under Basel I & II, RBI guidelines on Risk Management-Standardized and Advanced approaches for Credit Risk; Internal Capital Adequacy Assessment process.

Unit IV Credit rating/credit scoring and rating system: Introduction, Design, Credit Bureaus, Stress test and sensitivity analysis

Unit V: Operational Risk: Introduction, Likely forms of operational risk, Causes for significant increase in operational risk, Basel Norms, RBI guidelines

Unit VI: Sound Principles of Operational Risk Management (SPOR): POR identification, SPOR measurement

Unit VII: Control of Operational Risk: Capital allocation for operational risk, Methodology, qualifying criteria for banks for the adoption of the methods.


Unit IX: Risk measurement: Calculation of risk, Risk exposure analysis

Unit X: Risk Management: Capital adequacy norms, prudential norms, exposure norms, regulatory prescriptions of risk management

Unit XI: Securitisation: Concept, Need of Securitization, Features, Securitization process, Limitations

Unit XII: Basel I

Unit XIII: Basel II

Unit XIV: Basel III

Unit XV: Technology Risk: Concept, Sources of Technology Risk, Sources of Technology Risk, Management of Technology Risk

Reference Book
- Uppal RK, Rimi Kaur, Banking Sector Reforms in India, New Century Publications, New Delhi
- Agarwal OP, Banking and Insurance, Himalaya Publishing House, Mumbai
- Vijayaragavan Iyengar, Introduction to Banking, Excel Books, New Delhi
- The Indian Institute of Bankers, Modern Banking, Mumbai
- Indian Institute of Banking and Finance, Risk Management, Mumbai
Course Code- DBFI403  

Life Insurance Management

Learning objectives:
- Understand the insurance mechanism and identify the relationship between insurers and their customers.
- Compare and contrast the types of life insurances available in the market.
- Explain the legalities and administrative issues of life policies.
- Interpret the regulatory framework governing life insurance.


Unit 2: Life Insurance Concept: Types of Insurance, Variations of Whole Life Insurance, Other types of Life Insurance.

Unit 3: Life insurance Contractual Provisions: Dividend Options, Non - Forfeiture Options, Settlement Options, Additional Life Insurance Benefits.


Unit 5: PREMIMUM AND BONUSES: Concept of Premium, Premium calculation, Actuarial valuation, Bonus.


Unit 7: UNDERWRITING: Introduction, Classification of Risks, Financial Underwriting, Non-medical underwriting, Underwriting by Agents, Recent Trends.

Unit 8: POLICY CONDITIONS: Age, Days of Grace, Lapse and Non-forfeiture, Paid up value, Revival, Assignment, Nomination, Surrenders and Loan, Indisputability of the Policy, Married Women’s Property Act Policy.


Unit 10: GROUP INSURANCE: Special, Legal / other features of Group Insurance; Superannuation Schemes, Group Insurance Scheme EDLI and Non-EDLI, Group Gratuity Scheme, Group Leave Encashment Schemes, Retirement Schemes.

UNIT 11: Re-insurance: Reasons for Reinsurance, Types of Reinsurance – Alternatives to Traditional Reinsurance, Functions of Reinsurance, Advantages and Disadvantages of Reinsurance.

UNIT 12: Life Insurance Risk Factors governing sum assured: Types of risks – Methods of


### UNIT-4 THE GENERAL INSURANCE MARKET:

### UNIT-5 THEORY AND PRACTICE OF RATING:
Basis of Rate Making, Tariffs, Market Agreements, Role of the T.A.C.

### UNIT-6 REGULATORY MATTERS:
I.R.D.A. Regulations, 2002 provisions for general insurance

### UNIT-7 FIRE INSURANCE:

### UNIT-8 MARINE INSURANCE:
Marine Insurance Coverages, Hull Insurance, Marine (Cargo) Insurance, Types of Marine Policies, Duration of cover, Claims

### UNIT-9 MOTOR INSURANCE:
Motor Vehicles Act, 1988, Personal Accident Cover for Owner-Driver, Theft Claims

### UNIT-10 PERSONAL ACCIDENT INSURANCE:
Types of Disablement, Claims, Extended coverage,

### UNIT-11 HEALTH INSURANCE:
Mediclaim Policy (Individual), Domiciliary Hospitalisation Benefit, Bhavishya Arogya Policy, TPA and its role.

### UNIT-12 LIABILITY INSURANCE:
Compulsory public liability Policy, Products liability Policy, Employer Liability Policy

### UNIT-13 ENGINEERING INSURANCE:

### UNIT-14 MISCELLANEOUS INSURANCE:

### UNIT-15 AGRICULTURE AND RURAL INSURANCES:
Agri-crop Insurance and other related insurance, Agricultural Pump Set Policy, Livestock Insurance, Poultry and fishery insurance, Micro-insurance and other rural insurance for rural community, Hut Insurance, The Role of government.

### Reference Book
- Insurance and Risk Management: P.K. Gupta
- Insurance Theory and Practice: Tripathi PHI
- Principles of Insurance Management: Neelam C Gulati, Excel Books
- Life and Health Insurance: Black, JR KENNETH & Harold Skipper, Pearson
IT AND FINTECH ELECTIVES

<table>
<thead>
<tr>
<th>Course Code- DITF401</th>
<th>e-Commerce</th>
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Learning objectives:
- Analyze the impact of E-commerce on business models and strategy.
- Describe the major types of E-commerce.
- Explain the process that should be followed in building an E-commerce presence.
- Identify the key security threats in the E-commerce environment.

Unit 1: Introduction to e-Commerce This unit provides you an overview of e-commerce. It defines and explains the e-commerce framework. It also explains the anatomy of e-commerce applications and discusses the role of media convergence in e-commerce.

Unit 2: Evolution of e-Commerce This unit recalls the history of e-commerce and analyses the worldwide growth of e-commerce. It lists the advantages and disadvantages of e-commerce. It explains the roadmap of e-commerce in India and its opportunities in Indian industries. It also explains the challenges faced by Indian organisations in e-transactions.

Unit 3: Network Infrastructure This unit discusses the aspects of internet hierarchy in the worldwide network. It explains the basic blocks of e-commerce and the seven layers in the network and the TCP/IP protocols. It's also provides you a list of advantages of the internet in the field of e-commerce.

Unit 4: e-Commerce Infrastructure This unit defines and explains the functions of the computer and Web server hardware. It also explains the server software and the different types of e-commerce software that widely in use.

Unit 5: Managing the e-Enterprise This unit defines e-business enterprise and explains the concepts involved in e-business enterprise. The unit gives the comparison between the conventional design and e-Organisation and explains the role of business organisation in an e-enterprise.

Unit 6: e-Commerce Process Models This unit explains business model with a block diagram. It also explains different e-business models based on Relationship of Transaction Parties. It also gives a diagrammatic explanation of e-commerce Sales Life Cycle (ESLC) model.

Unit 7: Risks of Insecure Systems This unit gives you an overview of the different kinds of risks associated with the internet transaction. It explains the risks to customers like false and malicious websites, stealing customer’s ID or credit card information and so on. It also explains the risks to the agents like customer impersonation and data theft. It also discusses the risks associated with
business transaction and transfer of data between partners.

**Unit 8: Management of Risk** This unit introduces the key components of risk management. It defines disaster recovery plans and explains the objectives and back-up alternatives for disaster recovery plans. It also explains the risk management paradigm and the aspects of assessment and control activities involved in risk management.

Unit 9: Legal and Taxation Issues on Employee Compensation This unit introduces the electronic payment system. It also explains different types of electronic payment systems. It discusses the concepts and issues involved in e-cash and smart card and credit card based electronic payment systems. It also discusses the security and privacy issues in electronic payment systems.

**Unit 10: Electronic Data Interchange (EDI)** This unit recalls the history of EDI. It explains the difficulties involved in the implementation of EDI. It also discusses the working concepts of EDI and the relationship between EDI and the Internet.

**Unit 11: e-Marketing** This unit explains the scope of marketing in e-commerce. It also talks about the 4Ps-Involv ed in internet marketing and explains the different techniques applied to internet marketing.

**Unit 12: Website Design Issues** This unit explains the process of website design that includes setting goals and objectives and preparing a budget for website design. It explains the strategies for website development as well.

**Unit 13: Consumer Oriented Business** This unit explains the customer market in detail. It discusses the concepts of one to one marketing and consumer demographics in consumer oriented marketing. It also explains the aspects of maintaining loyalty and gaining customer acceptance. It explains search engines and online catalogues.

**Unit 14: Management Challenges and opportunities** This unit explains the new business model. It also discusses the required changes in business processes and channel conflicts. It explains the legal and regulatory environment for e-commerce. It also discusses about the security and privacy aspects of faced by the management.

**Unit 15: The Future Directions** This unit explains the concepts of m-commerce. It also discusses the difference between m-commerce and e-commerce and lists the different software agents.

**Reference Book**

2. Hanson & Kalyanam, Internet Marketing & e-commerce, Thomson Learning, Bombay.

<table>
<thead>
<tr>
<th>Course Code- DITF402</th>
<th>FinTech - Payments and Regulations</th>
</tr>
</thead>
</table>

**Learning objectives:**
- Growth of fintech in global market
- Fintech for financial business
- Effect of technology in changing personal financial practices
- Fintech in credit card markets

**Unit 1:** Overview of FinTech This unit give you foundational overview of FinTech and robo-advising. You'll identify the main goals of fintech

**Unit 2:** Key areas of FinTech and financial apps Examine new attitudes towards financial advice and trust in the financial industry. Through close examination of the financial behaviors of millennials, you'll gain a deeper understanding of the effects of technology in changing personal financial practices

**Unit 3:** Growth of fintech in global market Analyze the reported valuations of selected robo-advisors and observe the growth of fintech in both insurtech and global markets.

**Unit 4:** Future of FinTech in financial market Be able to assess the value of FinTech and robo-advising, and gain a better understanding of the future of fintech in various financial markets

**Unit 5:** Trust in Financial Industry. Understand why trust is necessary in financial industry. How cryptocurrency can ensure this trust. Understand how Bitcoin utilizes digital signatures in their transactions to ensure privacy for individuals. Then, you'll examine how blockchain technology employs Hash Functions to detect tampering attempts

**Unit 6:** Effect of technology in changing personal financial practices Explore the creation and concept of Distributed Consensus Protocol and how Proof of Work incentivizes honest trading and stable currency creation.

**Unit 7:** Key components of successful financial advisor Examine Cryptocurrency as an asset class, and delve deeper into whether Cryptocurrency has a place in individual investment portfolios.

**Unit 8:** Future of investing This unit will give better understand the future of investing, and you be able to utilize trust to overcome volatile markets and navigate complex decisions.

**Unit 9:** Foundation of Payment methods Capital Asset Pricing Model, and key concepts of Modern Portfolio Theory such as Tangency Portfolio and the Sharpe Ratio.
**Unit 1:** History and evolution of Blockchain What is Cryptocurrency and how is it an innovative and effective method of currency?

**Unit 2:** How Blockchain in different from other enterprise applications like ERP Understand the fundamental blocks of a blockchain and see its difference from ERP

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**Reference Book**

2. Sanjay Phadke, Fintech Future : The Digital DNA of Finance
3. Diane Maurice, Jack Freund, et al., Fintech: Growth and Deregulation

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<table>
<thead>
<tr>
<th>Course Code-DITF403</th>
<th>Crypto-currency and Blockchain</th>
</tr>
</thead>
</table>

**Learning objectives:**

- To understand what Blockchain is and why it is used
- To be able to explain the different components involved within Blockchain
- To know when and why you may want to use Blockchain within your environment
- To master at a high level what cryptocurrency is

**Unit 1:** History and evolution of Blockchain What is Cryptocurrency and how is it an innovative and effective method of currency?

**Unit 2:** How Blockchain in different from other enterprise applications like ERP Understand the fundamental blocks of a blockchain and see its difference from ERP
<table>
<thead>
<tr>
<th>Unit 3: Blockchain Technology Fundamentals</th>
<th>Understand all the essential technology which are needed to implement blockchain.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 4: Blockchain Technology Landscape</td>
<td>How to define a currency, analyze the foundations of digital signatures and blockchain technology in cryptocurrency, and accurately assess the risks of cryptocurrency in a modern investment portfolio.</td>
</tr>
<tr>
<td>Unit 5: Blockchain Security(Fabric SideDB)</td>
<td>Understand how Bitcoin utilizes digital signatures in their transactions to ensure privacy for individuals. Then, you’ll examine how blockchain technology employs Hash Functions to detect tampering attempts.</td>
</tr>
<tr>
<td>Unit 6: Application of Blockchain in Supply Chain</td>
<td>Have a deeper understanding of the fundamentals of Blockchain, be able to utilize Blockchain in many different contexts, and assess how Blockchain will affect both business and society in the future.</td>
</tr>
<tr>
<td>Unit 7: Application of Blockchain in Manufacturing</td>
<td>See the applications of blockchain in manufacturing sector by taking cases.</td>
</tr>
<tr>
<td>Unit 8: Application of Blockchain in Health and Public Services</td>
<td>See the applications of blockchain in manufacturing sector by taking cases.</td>
</tr>
<tr>
<td>Unit 9: Application of Blockchain in Financial Sector</td>
<td>See the applications of blockchain in manufacturing sector by taking cases.</td>
</tr>
<tr>
<td>Unit 10: Blockchain in Government (Advantages, Use Cases, Digital Identity)</td>
<td>See the applications of blockchain in manufacturing sector by taking cases.</td>
</tr>
<tr>
<td>Unit 11: Blockchain in Government(Hyperledger Indy, Tax Payments and Land Registry Records)</td>
<td></td>
</tr>
<tr>
<td>Unit 12: Overview of Cryptocurrency</td>
<td>Examine Cryptocurrency as an asset class, and delve deeper into whether Cryptocurrency has a place in individual investment portfolios.</td>
</tr>
<tr>
<td>Unit 13: Policy of different countries on acceptance and legality of Crypto currency</td>
<td>Why countries ban cryptocurrency and what impact does it have on their valuation.</td>
</tr>
<tr>
<td>Unit 14: Challenges in implementing Blockchain</td>
<td>Different challenges like regulations, reluctance to acceptance by the common people and other concerns.</td>
</tr>
<tr>
<td>Unit 15: Future of Blockchain and Cryptocurrency</td>
<td>The use of Bitcoin technology for decentralizing property, markets, and so on has been hailed as a recipe for economic and political disruption. We’ll look at the technological underpinnings of these proposals and the potential impact on society.</td>
</tr>
</tbody>
</table>

**Reference Book**

1. Don Tapscott and Alex Tapscott, *Blockchain Revolution: How the Technology Behind Bitcoin and Other Cryptocurrencies is Changing the World*
2. Blockchain Architecture Design and Use Cases, Prof. Sandip Chakraborty & Dr. Praveen Jayachandran | IIT Kharagpur and IBM
3. Antony Lewis, *The Basics of Bitcoins and Blockchains*
4. Srihari Kapu, *Blockchain Explained: A Pragmatic Approach*
Learning objectives:
- To provide a contemporary and forward-looking on the theory and practice of Enterprise Resource Planning Technology.
- To focus on a strong emphasis upon practice of theory in Applications and Practical oriented approach.
- To train the students to develop the basic understanding of how ERP enriches the business organizations in achieving a multidimensional growth.
- To aim at preparing the students technological competitive and make them ready to self-upgrade with the higher technical skills.

Unit 1: Introduction to ERP This Unit explains the concept of ERP, gives brief history of evolution of ERP, assesses the benefits of ERP, and analyses the reasons for failure of ERP.

Unit 2: Enterprise- An Overview This unit defines the role of Enterprise, assesses the need of an Enterprise, evaluates the business modelling approaches, and the method to integrate the management information to the enterprise.

Unit 3: ERP and Related Technologies This unit analyses the technologies that are related to ERP systems. It explains how technologies like BPR, enables organisations to analyse their business functions better, thereby facilitating a more efficient ERP implementation. This unit analyses how predecessors of ERP like MIS, DSS, and EIS will slowly phase out. It explains how new technologies and concepts like data warehousing, data mining, OLAP, and Supply Chain Management (SCM) help, to increase the power, usefulness, efficiency, and effectiveness of ERP systems.

Unit 4: ERP Tools and Software and Selection Methodology This unit analyses the methodology and criteria used in ERP selection. It explains the ERP selection process, analyses the ERP tools available in the market, identifies different ERP vendors, and also explains the ERP vendor selection process.

Unit 5: ERP Modules This unit evaluates different and popular modules of an ERP package like finance, manufacturing, plant maintenance, materials management, and so on. It describes subsystems or sub-modules of these models, and also describes how these modules function together.

Unit 6: ERP – A Manufacturing Perspective This unit analyses and introduces the various techniques and technologies that are used in the manufacturing industry. It explains how ERP and other concepts like MRP, MRP-II, CAD/CAM, PDM, and so on to improve the competitiveness of a company, and assess the different types of manufacturing operations like MTS, MTO, ETO, ATO, and CTO, and so on.

Unit 7: ERP – A Purchasing and Sales Perspectives This unit explains the functioning of purchase department in an organisation. It elucidates the features and benefits of ERP – Purchase module, analyses the importance of Sales and Distribution module, and describes the functioning of various sub module of Sales and Distribution module.
Unit 8: ERP – An Inventory Control Perspective This unit explains inventory management and its function, lists out the features of inventory management, elucidates the benefits and drawbacks of inventory management. It analyses how ERP inventory systems can be installed and implemented, explains Web ERP and its benefits, illustrates the types of inventory management, and the process of transactions in an organisation, and also describes Inventory ERP software module.

Unit 9: ERP – CRM Perspective This unit explains the concept of CRM, describes the types and sub modules of CRM, lists out the benefits and challenges of CRM, and elucidates the implementation of CRM.

Unit 10: ERP – HR Perspective & Finance Perspective This unit explains the concept of Human Resources (HR), describes the activities of Human Resource Management systems, lists out the benefits and features of Human Resources Management module. It elucidates the role of ERP in Human Resource Management systems and explains the role and workflow of ERP in the financial module of an organisation.

Unit 11: ERP Implementation Lifecycle This unit describes the implementation lifecycle for an ERP package, assess the various approaches for implementation of ERP, and select the right methodology for ERP implementation.

Unit 12: Benefits of ERP This unit compares the direct and indirect benefits of ERP implementation. It explains how integration of information and automation of business processes make improvements possible.

Unit 13: ERP Market This unit describes the ERP market, explains the major player in it, and their respective market share. It assesses the various market trends in ERP, recognises the target market of ERP, analyses and tells how to potentially use ERP in the market driven economy, and assess the seven major ERP vendors—SAPAG, Baan, PeopleSoft, JD Edwards, Oracle, QAD and SSA.

Unit 14: ERP Vendors, Consultants, and Users This unit evaluates the three major players in an ERP implementation and their profiles. It describes the roles of each of these players and elucidates the reasons for success of an ERP implementation.

Unit 15: Future Directions in ERP This unit describes the future direction of the ERP market and trends. It elucidates how these trends will shape the future ERP products. It also describes how ERP vendors, striving for more market share are making their products more efficient and loaded with features by using new technological innovations.

Reference Book


OPERATIONS MANAGEMENT ELECTIVES.

<table>
<thead>
<tr>
<th>Course Code- DOMS401</th>
<th>Services Operations Management</th>
</tr>
</thead>
</table>

Learning objectives:
- An overview of Service and Operations Management as management function in general.
- Develop an understanding of the terminology and responsibilities that relate to Service Operations Management.
- Describe the function of the Service Operations Management discipline in various sectors of the economy through case study.
- Interpret basic tools and skills used in solving problems traditionally associated with operating the service operations system.

Unit 1: Nature of Services and Classification
The role of services in the nation’s economy, the evolution of services and drivers of growth of the service sector. Each service exhibits distinctive characteristics, which makes services different from goods. The service sector is comprised of various industries which are diverse in the terms of labour requirement, investment requirements and many other aspects. The labour requirement, for example, ranges from a hair salon service with few employees to the airline industry with a huge number of the employee base. Various classifications, which help in categorizing different service industries under a common category.

Unit 2: Service Strategy and competitiveness
A service strategy is defined by considering the competitive environment of services using Porter's model. Various competitive strategies are discussed which can be adopted by service organizations to achieve a competitive environment. Various elements of strategic service vision are discussed.

Unit 3: Service design and development
Role of innovation in services and new service development cycle. Various approaches towards service delivery design are discussed which complement the service delivery process.

Unit 4: Human resource management in services
Human resource planning and selection of the right employees for the right jobs. People management byways of effective training programmes, rewarding employees, proper communication channels, managing teams and encouraging empowerment and motivation. Work measurement techniques for evaluating the effective utilization of personnel for their respective jobs.

Unit 5: Managing Service Quality
Various perspectives on service quality, various dimensions of service quality and gaps between perceived service quality and expected service quality. Quality parameters about customer requirements right at the time of designing service product. Quality control and TQM tolls in Services.

Unit 6: Facility location for services
To analyze the facility layout process for the smooth flow of
To discuss important considerations and decision factors of service facility location. Quantitative models for facility location

**Unit 7:** Demand management in Services Qualitative and quantitative techniques to forecast demand. Various strategies to have smooth customer demand either by segmenting customer based on arrival pattern or by offering price incentives or by adopting overbooking strategy.

**Unit 8:** Capacity or Supply Management in Services Various challenges and strategies in managing service capacity. The major capacity related challenge is to manage the trade-off between having idle capacity during low demand and having waiting customers during high demand. Strategies to increase revenues for service organizations having relatively fixed capacity. Scheduling workforce based on the varying demand in the intervals over a finite time horizon.

**Unit 9:** Scheduling in Services Scheduling workforce based on the varying demand in the intervals over a finite time horizon.

**Unit 10:** Introduction and characteristic of queuing systems Any kind of waiting time in a queue may result in customer dissatisfaction and sometimes result in losing a customer. Queuing characteristics based on queuing theory are presented which is comprised of arrival distribution, service time distribution, number of servers in the queuing system and finite or infinite population.

**Unit 11:** Queuing models M/M/1 Queuing Model, M/M/c Queuing Model, M/M/1/N Queuing Model.

**Unit 12:** Service Inventory Management To discuss the role of service inventory and types of inventories in the service sector. Forms of Service Inventory. Managing Inventory in services versus managing inventory in the manufacturing sector.

**Unit 13:** Service Supply chain The objective of achieving efficiency and or responsiveness is equally important and relevant in the whole network of participants involved in delivery service called the service supply chain. The structure of a supply chain can vary from a simple serial supply chain to a broad network of supply chain entities.

**Unit 14:** Quantitative Models to manage service Operations using DEA To demonstrate the concept of data Envelopment Analysis to compare the performance of service units/ DEA can be used to analyse the performance of several units to set a benchmark. The analysis can be used to discover the inefficient operations or units even for the most profitable organizations, DEA techniques are based on linear algebra and are related to linear programming concepts. The technique is similar to mathematical duality relations in linear programming.

**Unit 15:** Use of Simulation in Service Operations management Simulation is a powerful technique for solving a wide variety of problems. Simulation is an imitation of the operation of a real-world process or system over time. Simulation is an experimental technique. It is a fast and relatively inexpensive method of experimenting on the computer. The idea is to Model the given system using some equations and determine its time-dependent behavior. Can be used as an analysis tool or a design tool.

**Reference Book**

1. Cengiz Haksever, Service Management and Operations
Learning objectives:

- Evaluate the principles of quality management and to explain how these principles can be applied within quality management systems.
- Identify the key aspects of the quality improvement cycle and to select and use appropriate tools and techniques for controlling, improving and measuring quality.
- Critically appraise the organizational, communication and teamwork requirements for effective quality management.
- Critically analyze the strategic issues in quality management, including current issues and developments, and to devise and evaluate quality implementation plans.

Unit 1: Quality as Strategy This unit focuses on the need for quality as a strategy, correlating data quality and strategy. It also describes data quality and data quality standards. It also explains governance and leadership, and policies and procedures in brief that are part of data quality standards.

Unit 2: Quality Concepts and Philosophies This unit defines quality and relates quality with productivity, costs, cycle time, and value, which can have a positive or negative impact on quality. It also discusses the historical development beginning from guilds of medieval Europe to World War II and comprehends quality concepts and philosophies as substantiated by quality gurus.

Unit 3: The Six Sigma Concept This unit explains six sigma as a quality framework. It also discusses the historical development of the six-sigma concept. It describes six sigma as a quality management strategy in five phases, and also, assesses the benefits and drawbacks of six sigma that are important to quality management.

Unit 4: Quality Management Systems This unit describes the quality management and Quality Management System (QMS). It also interprets the reasons for implementing a quality management system. It also classifies different types of quality management systems that can be implemented to guide an organisation towards improved performance and explains quality management system design and requirements to achieve more consistent quality.

Unit 5: Strategic Quality Planning and Management This unit discusses Strategic Quality Planning and Management, its elements and elucidates the concept of integrating quality into Strategic Management. It also identifies the advantages of Quality Planning and the development stages of strategies and goals. It analyses the specific characteristics and execution of Action Plans. It gives an overview of the role played by Executive Leadership to implement strategies and goals and the obstacles to achieving the planned goals.

Unit 6: Quality Improvement This unit focuses on Quality Improvement and the methods adopted for the same within an organisation. It gives an overview of the concepts such as Quality Standard and Quality Terms. The unit identifies the problems encountered in the process of Quality Improvement. It also describes the Project-by-Project Approach with the example and the need for frequent improvement.
Unit 7: Reliability This unit defines the concept of Reliability, its types and the requirements for the same. It describes Reliability theories on equipment performances, Reliability predictions and estimations. It also identifies the measures of Reliability and the varying degrees of reliability required for different situations in an organisation.

Unit 8: Quality Cost and Schedule This unit explains the concept of Quality Cost and Schedule, its types, and the typical uses of quality cost. It describes the scenario of Initial Cost study and Data collection for the same within an organisation. The unit analyses the Cost Control Problem and the implemented risks. It also gives an overview of Schedule control, budget updates and Cost and schedule information.

Unit 9: Quality Control and Quality Assurance Audits This unit covers quality control, quality assurance, quality audits and quality assessments. It describes the seven quality control tools. It identifies control subjects for quality. It describes how to prepare and plan audits. It also explains the basic steps in audit reporting.

Unit 10: Developing Quality Culture This unit covers quality culture and corporate culture. It also explains different theories which motivated quality culture. It summarises why quality culture is important. It also categorises five key drivers for quality culture.

Unit 11: Designing for Quality This unit describes the quality of functional deployment. It generalises the key issues that emerge while viewing design and development as a process. It also explains designing for safety, maintainability, manufacturability and reliability.

Unit 12: Quality in Manufacturing and Service Sectors This unit explains the various steps involved in the initial planning for quality. It classifies the three main criteria for self-control. It describes the overall review of manufacturing planning. It also evaluates measurements in manufacturing operations and service operations.

Unit 13: Quality Analysis and Tools This unit introduces the history and concept of quality analysis and tools. It explains the four new tools and techniques for quality analysis. It also describes the different techniques used in an organisation to monitor quality analysis. It evaluates the concept of benchmarking and Quality Function Deployment (QFD).

Unit 14: Total Quality Management This unit defines Total Quality Management (TQM) and its concept. It discusses a modern management framework for total quality and the elements involved in it. It also discusses the starting changes, the six basic stages and profiles of success after implementing Total Quality Management (TQM).

Unit 15: Quality and Productivity The unit gives an idea of Quality Control, its significance, and the different methods of Quality Control. The unit also defines the concept of Productivity and its significance. It describes the factors that determine productivity levels. It also analyses the relation between Quality and Productivity within an organisation.

Reference Book

1. Besterfield Dale H., Besterfield Carol,, et al., Total Quality Management (TQM) 5e by Pearson
2. Poornima M. Charantimath, Total Quality Management 3E, Person
3. Besterfield, Total Quality Management 4e
Learning objectives:
- Recognize the objectives, functions, applications of PPC and forecasting techniques.
- Explain different Inventory control techniques.
- Solve routing and scheduling problems
- Summarize various aggregate production planning techniques.

<table>
<thead>
<tr>
<th>Unit 1: Production Planning and Control Concepts</th>
<th>This unit sets the context of integrated systems in PPC and System/Aids. The unit speaks about the devise production planning for mass, batch &amp; job type productions through aggregate and master production systems. It defines functions and different levels and procedures adopted in PPC. The unit describes how PPC works as an integrated system and the positioning policy, it also differentiates planning and control functions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 2: Advanced Planning and Scheduling</td>
<td>This unit familiarises you with advanced production and planning control for production systems. It explains production planning and control activities. It also comprehends the aggregate, sales order planning and other planning and also describes production planning strategies.</td>
</tr>
<tr>
<td>Unit 3: Functions and Tasks of Production Control</td>
<td>This unit covers the concepts of control over production flow, monitoring the production schedules, directing and checking the course and progress of the work. and maintaining records of the completed work orders.</td>
</tr>
<tr>
<td>Unit 4: Forecast Methods and Techniques</td>
<td>This unit gives an overview of the forecast methods and techniques. The unit makes you more familiar by giving classification and comprehending the limitations of forecasting and the advantages of using forecasting systems. It describes the forecasting and prediction. and the need for demand forecasting.</td>
</tr>
<tr>
<td>Unit 5: Inventory Control with Known Demand</td>
<td>This unit covers the aspects of inventory management and control process and defines different types of inventory and inventory controls. The unit describes the benefits of inventory control and inventory reduction options and tactics. It explains various inventory management processes and controls.</td>
</tr>
<tr>
<td>Unit 6: Economic Order Quantity-Inventory Management</td>
<td>This unit defines inventory costs and their relationships. It also explains the classification of inventory models and the deterministic models in inventory control; it also allows you to calculate EOQ through different models.</td>
</tr>
<tr>
<td>Unit 7: Operation Scheduling</td>
<td>This unit takes you through the different concepts of operation scheduling such as purpose of operation scheduling, scheduling guidelines and constraints and scheduling methodology. It defines the production planning and scheduling and autonation.</td>
</tr>
<tr>
<td>Unit 8: Plan: Product Mix Problems and Scheduling</td>
<td>This unit explains and analyses different scheduling methods/technology. It comprehends Gantt charts, schedule boards and computer graphics. It elucidates performance measures and priority rules for scheduling. The unit also explains forward and backward scheduling</td>
</tr>
<tr>
<td>Unit 9: Development in Manufacturing Technologies</td>
<td>This unit familiarises you with the different types of manufacturing techniques and illustrates computer integrated manufacturing.</td>
</tr>
<tr>
<td>Unit 10: Flexible Manufacturing System</td>
<td>This unit explains productivity versus flexibility, describes...</td>
</tr>
</tbody>
</table>
the requirement of characteristic features for production. The unit defines the benefits of FMS. This unit allows you to analyse the global sequential scenario of manufacturing and reviews the fundamental building blocks of a flexible system.

**Unit 11: Synchronous Manufacturing** This unit covers the different aspects of synchronous manufacturing such as symptoms of poor synchronization goals and principles of synchronous manufacturing, Capacity Constrained Resources (CCR) and so on. It defines Goldratt’s Theory of Constraints (TOC) and explains the Drum-Buffer-Rope technique in scheduling.

**Unit 12: Other Aspects of Planning** This unit defines quality planning, explains human resource planning and elucidates maintenance planning. The unit also describes capacity planning.

**Unit 13: Production Distribution System Design** This unit elucidates capacity scheduling and aggregate capacity scheduling; it explains aggregation techniques and disaggregating of the aggregate plan. The unit also defines plant location and describe multiple plant production facility designs.

**Unit 14: Role of Production Planning in Supply Chain and Logistics** This unit familiarises you with the role of production planning in supply chain and logistics by explaining the concepts of supply chain management and just in time purchasing.

**Unit 15: Planning for Global Sourcing** This unit defines outsourcing. It allows you to analyse the advantage and disadvantage of global sourcing. The unit speaks about the concept of value chain dynamics and strategic decisions & sourcing techniques along with the various benefits of outsourcing.

**Reference Book**

1. K. C. Jain and L. N. Agarwal, Production, Planning and Control & Industrial Management
2. M. Mahajan and Dhanpat Rai & Co., Production Planning And Control
3. Samuel Eilon, Elements Of Production Planning and Control

**Course Code: DOMS404**

**Project Management**

**Learning objectives:**

- To make them understand the concepts of Project Management for planning to execution of projects.
- To make them understand the feasibility analysis in Project Management and network analysis tools for cost and time estimation.
- To enable them to comprehend the fundamentals of Contract Administration, Costing and Budgeting.
- Make them capable to analyze, apply and appreciate contemporary project management tools and methodologies.

**Unit 1: Overview of Project Management: Definition of project, project management and project management steps. Programme management. Project feasibility.**

**Unit 2: Project feasibility: Technical feasibility, commercial feasibility, economic feasibility, financial feasibility, managerial feasibility. Requests for proposal, Project evaluation.**
Unit 3: Project contracts: Fixed-price contracts, cost plus fixed fee, Incentives and penalties. Budgeting and Capital rationing.


Unit 5: Project organization structure


Unit 7: Project Control: A closed-loop control system. Cost and Schedule control system criteria.

Unit 8: Project Management Information Systems: Data collection, Dissemination of information, Problems with reporting, Computerized PMIS. Desired features.

Unit 9: Quality control for projects: Conformance to specifications, Goals, conflicts. Cost of quality.

Unit 10: Risk management for projects: Identification, assessment and management of risks.

Unit 11: International project management

Unit 12: Critical Chain Project management: Characteristics of critical paths and how CCPM addresses these problems. Reasons for project time overruns. Steps of CCPM. Relation with TOC and steps of TOC. CCPM Success stories.


Unit 14: Project Selection Criteria: Selection criteria by technical competency, cost-benefit ratio, management priorities, expected duration, resource requirements and availability.

Unit 15: Project Selection models: Qualitative models, scoring models, financial models, decision analysis, utility theory. Pairwise comparison of projects

Reference Book
5.3. Duration of the programme

<table>
<thead>
<tr>
<th>Programme</th>
<th>Level</th>
<th>Duration</th>
<th>Maximum duration for completion</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA</td>
<td>Master's Degree</td>
<td>2 years</td>
<td>(2+ 2) years (As per UGC Notification on Specification of Degree, 2014)</td>
<td>102 Credits</td>
</tr>
</tbody>
</table>

5.4. Faculty and support staff requirement

<table>
<thead>
<tr>
<th>Academic Staff</th>
<th>Number available to meet the required delivery norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme Coordinator</td>
<td>1 member</td>
</tr>
<tr>
<td>Course Coordinator</td>
<td>1 member</td>
</tr>
<tr>
<td>Course Mentor</td>
<td>1 member per batch of 250 students</td>
</tr>
</tbody>
</table>

5.5. Instructional delivery mechanisms

The Directorate of Online Education of MUJ comprises of faculty members and staff who are well versed in Distance Education and Online delivery.

An Academic calendar depicting dates for all major events during each semester will be prepared by faculty members and shared with students through LMS, at the beginning of each academic session.

Apart from providing content in the form of Self Learning Material, enough e-learning resources in the form of Audio and Video content will be provided to students. Regular engagement of students will be ensured through the following means:

- Conduct of Webinars/live lectures/online lectures/Virtual Class
- By encouraging them to participate in mandatory Discussion Forums to stimulate their thinking, and to be able to fearlessly express their views in forums. These discussion forums will be moderated by faculty to provide equal opportunity for everyone to participate, as well as to ensure maintenance of decorum of the forum.
- Through periodic formative assessments

Regular evaluation of content learnt will be provided for, through Self-Assessment Questions within the SLM, as well as quizzes on the LMS. The quizzes can be taken any number of times, so that they reach a stage of being able to answer questions without errors, which is a reflection of their understanding of the concept.
Effort will be made to provide case studies to enhance their analytical ability and make right decisions.

Link to National Portals (SWAYAM/NPTEL) will be provided, as also link to University’s digital library portal.

All links to additional reading will be provided in the LMS. Interested students can study beyond the confines of the syllabus.

5.6. Identification of media—print, audio or video, online, computer aided

LMS provides for all audio video content (e-learning material, e-pubs, faculty-led video sessions, virtual classrooms and discussion boards), dashboard of their progress in learning, comparison with their peers in terms of learning, regular notifications regarding upcoming Webinars/virtual classes, Assignments, Discussion Forum participations and Examinations. It also provides an opportunity for raising queries if any, and seek answers to the same, by chat bot or course mentors.

5.7. Student Support Services

The Student Support services will be facilitated by the Directorate of Online Education, Manipal University Jaipur, Rajasthan which includes the pre-admission student support services like counselling about the programme including curriculum design, mode of delivery, fee structure and evaluation methods. Post-admission student support services include guiding students towards accessing e-identity card, LMS portal, Academic calendar and academic delivery. Examinations support staff shall answer queries pertaining to conduct of end-semester examinations, evaluation and issue of certificates.

6. Procedure for Admission, Curriculum Transaction and Evaluation

The purpose of Online education by Manipal University, Jaipur is to provide flexible learning opportunities to students to attain qualification, wherever learners are not able to attend the regular classroom teaching. Academic programmes offered for such candidates under Online Learning mode will be conducted by Directorate of Online Education-Manipal University, Jaipur with support of the various University schools. The programmes/courses may be termed Online mode for award of Degree. Eligibility criteria, programme/course structure, curriculum, evaluation criteria and duration of programme shall be approved by Board of Studies and Academic Council which are based on UGC guidelines.
Candidates seeking admissions in any programme offered by Directorate of Online Education-Manipal University, Jaipur shall fill up online application form available on DOE-MUJ website. Before applying, candidates must check eligibility criteria for programme that they are interested in. Details about Eligibility criteria, programme structure, curriculum, duration, and fee structure are available on the website.

6.1. Procedure for Admission

6.1.1 Minimum Eligibility Criteria for admission

- Candidate must have a 10 + 2 + 3 years bachelor degree or equivalent qualification as recognized by Association of Indian Universities (AIU) or other competent body in any discipline from a recognized University/Institution with a minimum of 50% (45% for Reserved category) marks in aggregate, and valid score from any relevant recognised aptitude test (CAT/MAT/CMAT/XAT/GMAT).

- Note: Candidates without aptitude test score need to appear and clear online Aptitude test conducted by Manipal University, Jaipur as per admission Norms to MBA Programme.

**Important Instructions:**

- All admissions shall be provisional until and unless candidates meet the eligibility criteria.

- Admission will stand cancelled if a candidate does not meet eligibility criteria, or there is failure to pay programme/course fees.

- Admission will stand cancelled, if candidate does not submit proof of eligibility within stipulated time given by Directorate of Online Education-Manipal University, Jaipur.

- Directorate of Online Education-Manipal University, Jaipur has the right to make necessary changes from time to time as deemed fit in Eligibility criteria, programme/course structure, curriculum, duration, fee structure and programme announcement dates. All changes will be notified on website.

- Candidates should carefully read all instructions given in Programme prospectus before start of application form.

6.1.2. Fee Structure and Financial assistance policy
Suggested Fee for MBA programme is INR 1,50,000/- (One Lakh Fifty Thousand only).
Overseas students need to remit equivalent of INR 3,00,000 in USD to University

A scholarship of upto 25% on tuition fees will be provided to Divyang students and students from Public Sector Undertaking / Defence background.

6.2. Curriculum Transactions

6.2.1. Programme Delivery

Manipal University, Jaipur has state-of-the-art mechanism for online mode of Academic delivery to ensure quality education. Faculty members at MUJ offer expert guidance and support for holistic development of the students. Faculty members are not mere facilitators of knowledge but they also mentor students to make learning more engaging and maintain high retention level. The programme will be delivered with an aim to provide expertise and ensure that students excel in their domains. The features of programme delivery are:

- Online Mode of Academic Delivery
- Periodic review of Curriculum and Study material
- Live Interactive lectures from faculty / Course coordinators
- Continuous Academic and Technical support
- Guidance from Course Co-ordinators
- Learning and delivery support from Course Mentors

6.2.2. Norms for Delivery of Courses in Online Mode

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Credit value of the course</th>
<th>No. of Weeks</th>
<th>No. of Interactive Sessions</th>
<th>Hours of Study Material</th>
<th>Self-Study hours including Assessment etc.</th>
<th>Total Hours of Study (based on 30 hours per credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Synchronous Online Counselling/ Webinars/ Interactive Live Lectures (1 hour per week)</td>
<td>e-Tutorial in hours</td>
<td>e-Content hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discussion Forum/ asynchronous Mentoring (2 hours per week)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>2 Credits</td>
<td>6 weeks</td>
<td>6 hours</td>
<td>12 hours</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>2.</td>
<td>4 Credits</td>
<td>12 weeks</td>
<td>12 hours</td>
<td>24 hours</td>
<td>20</td>
<td>44</td>
</tr>
</tbody>
</table>

6.2.3. Learning Management System to support Online mode of Course delivery
LMS Platform has been built to help learners reach their potential in their chosen programme. It is a secure, reliable learning experience tool that works consistently on Web and Mobile devices. Its simple interface makes it easy for instructors to design courses, create content and grade assignments. It provides a great mobile experience due to the responsive design which is paired with purpose-built native apps. It provides seamless accessibility to ensure all tools are standards-compliant and easy for students to navigate using assistive technologies. It provides 24 X 7 learning experience to facilitate learning as per the pace chosen by learners. Digital portfolio functionality allows students to document and share their learning journey as it happens, on both web and mobile platforms.

6.2.4. Course Design

The Course content is designed as per the SWAYAM guidelines using 4-quadrant approach as detailed below to facilitate seamless delivery and learning experience

(a) Quadrant-I i.e. e-Tutorial, that contains – Faculty led Video and Audio Contents, Simulations, video demonstrations, Virtual Labs

(b) Quadrant-II i.e. e-Content that contains - Portable Document Format or e-Books or Illustration, video demonstrations, documents as required.

(c) Quadrant-III i.e. Discussion forums to raise and clarify doubts on real time basis by the Course Coordinator and his team.

(d) Quadrant-IV i.e. Self-Assessment, that contains MCQs, Problems, Quizzes, Assignments with solutions and Discussion forum topics.
6.2.5. Academic Calendar

<table>
<thead>
<tr>
<th>S/No</th>
<th>Event</th>
<th>Batch</th>
<th>Last Date (Tentative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Commencement of semester</td>
<td>January</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; January</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; July</td>
</tr>
<tr>
<td>2</td>
<td>Enrol student to Learning Management system</td>
<td>January</td>
<td>Within 2 working days of fee confirmation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Assignment Submission</td>
<td>January</td>
<td>March end and April end</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July</td>
<td>September end and October end</td>
</tr>
<tr>
<td>4</td>
<td>Submission of Synopsis (Applicable during Pre final semester)</td>
<td>January</td>
<td>30&lt;sup&gt;th&lt;/sup&gt; April</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July</td>
<td>30&lt;sup&gt;th&lt;/sup&gt; October</td>
</tr>
<tr>
<td>5</td>
<td>Project Report Submission (Applicable during Final semester)</td>
<td>January</td>
<td>30&lt;sup&gt;th&lt;/sup&gt; April</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July</td>
<td>30&lt;sup&gt;th&lt;/sup&gt; October</td>
</tr>
<tr>
<td>6</td>
<td>Webinars / Interactive Live Lectures and Discussion Forum for query resolution</td>
<td>January</td>
<td>Mar to May</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July</td>
<td>September to November</td>
</tr>
<tr>
<td>7</td>
<td>Admit Card Generation</td>
<td>January</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt; week of May</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt; week of Nov</td>
</tr>
<tr>
<td>8</td>
<td>Term End Examination</td>
<td>January</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; week of June (TEE June)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Week of December (TEE December)</td>
</tr>
<tr>
<td>9</td>
<td>Result Declaration of End Term Examination</td>
<td>January</td>
<td>Last week of August</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July</td>
<td>Last week of February</td>
</tr>
</tbody>
</table>

6.3. Evaluation

The students’ learning in a course would be evaluated based on Internal assignments, students’ response sheets, and semester end examinations. University adopts rigorous process in development of question papers, question banks, assignments and their moderation, conduct of examinations, evaluation of answer scripts by qualified teachers, and result declaration. The Directorate shall frame the question papers so as to ensure that no part of the syllabus is left out of study by a learner.

The evaluation shall include two types of assessments-continuous or formative assessment in the form of assignments, and summative assessment in the form of end semester examination or term end examination which will be held with technology supported remote proctored examination tool.
However, we shall be considering the guidelines issued by the Regulatory bodies from time-to-time about conduct of examinations.

The examinations shall be conducted to assess the knowledge acquired during the study. There shall be two systems of examinations viz., internal and external examinations. In the case of theory courses, the internal evaluation shall be conducted as Continuous Internal Assessment via Student assignments preparation, quizzes. The internal assessment shall comprise of maximum of 30 marks for each course. The end semester examination shall be of three hours duration for each course at the end of each semester.

6.3.1. Question Paper Pattern

Time: 3 Hours
Max. Marks: 70

Part A - (Multiple Choice Questions) - 10 x 2 Marks = 20 Marks
Part B - (Short Answers) - Answer any 4 (out of 6) 4 x 5 Marks = 20 Marks
Part C – (Long Answers) – Any 3 (out of 4) x 10 Marks = 30 Marks

6.3.2. Distribution of Marks in Continuous Internal Assessments

The following procedure shall be followed for awarding internal marks for theory courses. Student must submit two assignments each carrying 30 marks and average of both will be considered as internal assessment marks.

6.3.3. Passing Minimum

The students are considered as passed in a course if they score 40% marks in the Continuous Evaluation (IA) and Term-End Examinations (TEE) individually. If a student fails in any one component (failure to get 40% marks either in IA or TEE), then he/she will be required to re-appear for that component only (IA or TEE as the case may be).

6.3.4. Marks and Grades

Based on the total marks obtained for each course in Internal Assessment and Term End examinations, student will be awarded grade for that course. The following table gives the marks, grade points, letter, grades and classification to indicate the performance of the candidate.
<table>
<thead>
<tr>
<th>Range of Marks</th>
<th>Grade Points</th>
<th>Letter Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥90 to ≤100</td>
<td>10</td>
<td>A+</td>
<td>Outstanding</td>
</tr>
<tr>
<td>≥80 to &lt;90</td>
<td>9</td>
<td>A</td>
<td>Excellent</td>
</tr>
<tr>
<td>≥75 to &lt;80</td>
<td>8</td>
<td>B+</td>
<td>Distinction</td>
</tr>
<tr>
<td>≥70 to &lt;75</td>
<td>7</td>
<td>B</td>
<td>Very Good</td>
</tr>
<tr>
<td>≥60 to &lt;70</td>
<td>6</td>
<td>C+</td>
<td>Good</td>
</tr>
<tr>
<td>≥50 to &lt;60</td>
<td>5</td>
<td>C</td>
<td>Average</td>
</tr>
<tr>
<td>≥40 to &lt;50</td>
<td>4</td>
<td>D+</td>
<td>Below Average</td>
</tr>
<tr>
<td>&lt;40</td>
<td>0</td>
<td>F</td>
<td>Re-appear</td>
</tr>
<tr>
<td>ABSENT</td>
<td>0</td>
<td>AAA</td>
<td>ABSENT</td>
</tr>
</tbody>
</table>

For a semester:

Grade Point Average [GPA] = \( \frac{\sum C_i G_i}{\sum C_i} \)

Grade Point Average =

\[
\frac{\text{Sum of the multiplication of grade points by the credits of the courses}}{\text{Sum of the credits of the courses in a semester}}
\]

\( C_i \) = Credits earned for the course \( i \) in any semester
\( G_i \) = Grade Point obtained for course \( i \) in any semester.
\( n \) refers to the semester in which such courses were credited

For the entire programme:

Cumulative Grade Point Average [CGPA] = \( \frac{\sum_n \sum_i C_{ni} G_{ni}}{\sum_n \sum_i C_{ni}} \)

\[
\text{CGPA} = \frac{\text{Sum of the multiplication of grade points by the credits of the entire programme}}{\text{Sum of the credits of the courses for the entire programme}}
\]

7. Requirement of the Laboratory Support and Library Resources

7.1. Laboratory Support

No lab based courses are offered in this program.

7.2. Library Resources
Directorate of Online Education, Manipal University, Jaipur, Rajasthan has excellent Library facility with adequate number of copies of books in relevant titles for MBA programme. The Central Library of Manipal University, Jaipur is also having good source of reference books. The books available at both the libraries are only for reference purpose and lending services. In addition, reference books as prescribed will be procured. The Digital library access will also be made available to students who are enrolled into online mode of education. In addition, the university membership on Swayam/ NPTEL/ Knimbus will also be made available to students. Complete e-Learning resources to course would be made available on Learning Management System for learning along with e-tutorial lectures. Further, expert lectures/workshops/webinars by industry experts would also be conducted for the students.

8. **Cost Estimate of the Programme and the Provisions**

The cost estimate of the Programme and provisions for the fund to meet out the expenditure to be incurred in connection with MBA Programme as follows:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Expenditure Heads</th>
<th>Approx. Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Programme Development (Single Time Investment)</td>
<td>82,00,000 INR</td>
</tr>
<tr>
<td>2</td>
<td>Programme Delivery (Per Year)</td>
<td>9,00,000 INR</td>
</tr>
<tr>
<td>3</td>
<td>Programme Maintenance (Per Year)</td>
<td>42,00,000 INR</td>
</tr>
</tbody>
</table>

9. **Quality assurance mechanism and expected programme outcomes**

The quality of the programme depends on scientific construction of the curriculum, strong-enough syllabus, sincere efforts leading to skilful execution of the course of the study. The ultimate achievement of MBA programme of study may reflect the gaining of knowledge and skill in management area. Gaining of knowledge and skills in IT may help the students to get new job opportunities, upgrading their position not only in employment, but also in the society.

The benchmark qualities of the programme may be reviewed based on the performance of students in their end semester examinations. Also, the feedback from the alumni, students, parents and employers will be received and analysed for further improvement of the quality of the programme.

Manipal University, Jaipur has constituted Centre for Internal Quality Assurance (CIQA), which will assist Director, Directorate of Online Education to conduct periodic review and assessments and assist the Directorate to implement necessary quality measures and
effectiveness in programme delivery. CIQA is constantly involved in reviewing all materials prepared by DOE, including syllabus, SLMs and e-learning content. CIQA will be involved in conducting studies to measure effectiveness of methods adopted for learning. As we proceed further, CIQA will involve in benchmarking quality of academic delivery, and perform various analyses, and guide all stakeholders towards upgrading quality constantly.

Centre for Internal Quality Assurance Committee (CIQAC) chaired by the Vice Chancellor consisting of internal and external experts oversees the functioning of Centre for Internal Quality Assurance and approve the reports generated by Centre for Internal Quality Assurance on the effectiveness of quality assurance systems and processes.

In addition to CIQA, as per the guidelines of National Assessment and Accreditation Council (NAAC), Manipal University, Jaipur has constituted Internal Quality Assurance Cell (IQAC), in which academicians, industry representatives and other stakeholders are nominated as members. The IQAC is a part of the institution’s system and work towards realisation of the goals of quality enhancement and sustenance, as quality enhancement is a continuous process. The prime task of the IQAC is to develop a system for conscious, consistent, and catalytic improvement in the overall performance of institutions. The work of the IQAC is the first step towards internalization and institutionalization of quality enhancement initiatives. IQAC’s elementary motive is to promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

The guidelines on quality monitoring mechanism prescribed by the UGC have been adopted by the Centre for Internal Quality Assurance for conducting institutional quality audits, to promote quality assurance and enhance as well as spread best-in-class practices of quality assurance. University has setup an effective system for collecting feedback from the stakeholders regularly to improve its programmes. The University will conduct self-assessments regularly and use the results to improve its systems, processes etc. and finally quality of programmes.