

ODL MBA

**MASTER OF BUSINESS ADMINISTRATION –
DUAL SPECIALIZATION**

PROGRAMME GUIDE

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INTRODUCTION

If not the real world, the classes of MBA are simulated as real world, making the learning close to reality. Wide range of emerging specialization areas are on offer.

Programme Outcomes

Program outcomes are narrower statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge and behaviours that students acquire in their matriculation through the program

1. **Decision Making:** Developing responsiveness to contextual social issues and exploring solutions, understanding business ethics and resolving ethical dilemmas
2. **Problem Solving:** Apply analytical decision-making skills and solve problems using cross functional information and research tools
3. **Global Outlook:** Demonstrate a global outlook with the ability to identify aspects of global business and Cross-Cultural Understanding
4. **Domain Knowledge:** Leveraging domain knowledge for organizing information, analysis and exploring business opportunities
5. **Communication:** Exercise effective written and oral communication skills for different business situations
6. **Leadership:** Demonstrate proactive leadership and build effective teams.
7. **Entrepreneurship:** Evaluate and execute ideas for entrepreneurship
8. **ICT usage:** Leverage Technology for organizing information, analysis and research

PROGRAMME SPECIFIC OUTCOMES

1. **PSO1:** Application of management concepts and research tools to understand ever changing laws, policies and competition in world of business.
2. **PSO2:** Synthesize knowledge of different functional areas to take decisions that provide competitive edge and enable efficient execution of projects.

SALIENT FEATURES

Internationally Accredited: Accredited by Accreditation Council for Business Schools and Program (ACBSP).

Entrepreneurship: Entrepreneurship projects are integral part of curriculum and help establish themselves as successful entrepreneurs.

Professional Enhancement: In addition to core curricula, course offers subjects like communication, analytical and soft skills to enhance personality and employability.

Contemporary Curriculum: Instill advanced knowledge about contemporary area in management such as Green Marketing

Projects: Opportunity to work on business projects to enhance managerial skills.

Community Development Projects: Opportunity to work on community development project on social issues to cultivate social sensitivity and sense of responsibility.

Holistic Development: Participation in technical events, sports and cultural activities help in the holistic development of students

Specializations: The course offers specialization offerings in Marketing, Finance, Human Resource Management, Data Science, Operations Management, International Business, Information Technology, Digital Marketing, Business Analytics etc.

Case Based Teaching: Usage of real-life case studies to provide interactive teaching and learning methodology

PROGRAMME CODE: 3521

DURATION OF THE PROGRAMME:

Minimum Duration 2 years

Maximum Duration 4 years

MEDIUM OF INSTRUCTION/EXAMINATION:

Medium of instruction and Examination shall be English.

PROGRAMME STRUCTURE
MASTER OF BUSINESS ADMINISTRATION (MBA)

Term	Core Courses (CR I, CR II, CR III A, CR III B) CR I+II - (8+3) 11 x 4 Credits CR III - 1 x 4 Credits 1 x 6 Credits	Discipline Specific Electives (DSE) 6 x 6 Credits	Ability Enhancement Courses (AECC) 1 x 4 Credits	Generic Electives (GE) 2 x 4 Credits	Credits
I	Discipline Specific Core- I Discipline Specific Core- II Discipline Specific Core- III Discipline Specific Core-IV Discipline Specific Core-V				20
II	Discipline Specific Core- VI Discipline Specific Core- VII Discipline Specific Core-VIII Discipline Specific Core- IX Discipline Specific Core- X		AECC- I Communication for Leaders		24
III	Discipline Specific Core - XI CR IIIA - Seminar on Summer Training OR 1 Course from the GE Basket 1 which is not chosen as Generic Elective (GE)	DSE- I DSE-II DSE-III		GE-I (Professional Enhancement, English, Political Science, Sociology)	30
IV	CR IIIB - Capstone Project	DSE- IV DSE-V DSE-VI		GE-II (Professional Enhancement, English, Political Science, Sociology)	28
Total	54 Credits	36 Credits	4 Credits	8 Credits	102

**PROGRAMME SCHEME
MASTER OF BUSINESS ADMINISTRATION (MBA)**

COURSE CODE	COURSE TITLE	Cr.	CA	ETE (Th.)	ETE (Pr.)
TERM1					
DEACC506	FINANCIAL REPORTING, STATEMENTS AND ANALYSIS	4	30	70	0
DEECO515	MANAGERIAL ECONOMICS	4	30	70	0
DEMGN578	INTERNATIONAL BUSINESS ENVIRONMENT	4	30	70	0
DEMKT503	MARKETING MANAGEMENT	4	30	70	0
DEMGN581	ORGANISATIONAL BEHAVIOUR AND HUMAN RESOURCE DYNAMICS	4	30	70	0
TERM2					
DEFIN542	CORPORATE FINANCE	4	30	70	0
DEOPR639	OPERATIONS MANAGEMENT AND RESEARCH	4	30	70	0
DEMGN801	BUSINESS ANALYTICS	4	30	70	0
DEMGN832	RESEARCH METHODOLOGY	4	30	70	0
DEBSL605	LEGAL ASPECTS OF BUSINESS	4	30	70	0
DEPEL537	COMMUNICATION FOR LEADERS	4	30	70	0
TERM3					
DSE-I	DISCIPLINE SPECIFIC ELECTIVE I	6	-	-	-
DSE-II	DISCIPLINE SPECIFIC ELECTIVE II	6	-	-	-
DSE-III	DISCIPLINE SPECIFIC ELECTIVE III	6	-	-	-
DEMGN571	CORPORATE STRATEGY AND ENTREPRENEURSHIP	4	30	70	0
GE-I	GENERIC ELECTIVE I	4	30	70	0
DEMGN583	SEMINAR ON SUMMER TRAINING		30	0	70
	OR 1 Course from the GE basket 1 which is not chosen as Generic Elective (GE).	4	-	-	-
TERM4					
DSE-IV	DISCIPLINE SPECIFIC ELECTIVE IV	6	-	-	-
DSE-V	DISCIPLINE SPECIFIC ELECTIVE V	6	-	-	-
DSE-VI	DISCIPLINE SPECIFIC ELECTIVE VI	6	-	-	-
GE-II	GENERIC ELECTIVE II	4	30	70	0
DEMGN696	CAPSTONE PROJECT	6	30	0	70
TOTAL CREDITS			102		

DISCIPLINE SPECIFIC ELECTIVE (DSE) BASKET (PICK ANY TWO ELECTIVE AREA)
(STUDENT WILL STUDY 3 COURSES IN TERM 3 AND 3 COURSES IN TERM 4 FROM THE
SELECTED AREAS/BASKET)

DISCIPLINE SPECIFIC ELECTIVE 1 BASKET (MARKETING)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ETP	Elective Area	Term
1	DEMKT529	CONSUMER BEHAVIOUR	6	30	70	0	MARKETING	3/4
2	DEMKT525	DIGITAL AND SOCIAL MEDIA MARKETING	6	30	70	0	MARKETING	3/4
3	DEMKT527	CUSTOMER RELATIONSHIP MANAGEMENT	6	30	70	0	MARKETING	3/4

DISCIPLINE SPECIFIC ELECTIVE 2 BASKET (FINANCE)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ETP	Elective Area	Term
1	DEFIN568	INTERNATIONAL FINANCIAL MANAGEMENT	6	30	70	0	FINANCE	3/4
2	DEFIN566	INTERNATIONAL BANKING AND FOREX MANAGEMENT	6	30	70	0	FINANCE	3/4
3	DEFIN564	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT	6	30	70	0	FINANCE	3/4

DISCIPLINE SPECIFIC ELECTIVE 3 BASKET (HUMAN RESOURCE MANAGEMENT)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ETP	Elective Area	Term
1	DEHRM511	TRAINING AND DEVELOPMENT	6	30	70	0	HUMAN RESOURCE	3/4
2	DEHRM516	INDUSTRIAL RELATION AND LABOUR LAWS	6	30	70	0	HUMAN RESOURCE	3/4
3	DEHRM508	HUMAN RESOURCE METRICS AND ANALYTICS	6	30	70	0	HUMAN RESOURCE	3/4

DISCIPLINE SPECIFIC ELECTIVE 4 BASKET (DATA SCIENCE)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ETP	Elective Area	Term
1	DECAP780	PROBABILITY AND STATISTICS	6	30	40	30	DATA SCIENCE	3/4
2	DECAP781	DATA SCIENCE TOOLBOX	6	30	40	30	DATA SCIENCE	3/4
3	DECAP782	ADVANCE DATA VISUALIZATION	6	30	40	30	DATA SCIENCE	3/4

DISCIPLINE SPECIFIC ELECTIVE 5 BASKET (OPERATIONS MANAGEMENT)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ETP	Elective Area	Term
1	DEOPR509	TOTAL QUALITY MANAGEMENT	6	30	70	0	OPERATIONS MANAGEMENT	3/4
2	DEOPR505	LOGISTICS AND SUPPLY CHAIN MANAGEMENT	6	30	70	0	OPERATIONS MANAGEMENT	3/4
3	DEOPR508	PROJECT MANAGEMENT	6	30	70	0	OPERATIONS MANAGEMENT	3/4

DISCIPLINE SPECIFIC ELECTIVE 6 BASKET (INTERNATIONAL BUSINESS)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ETP	Elective Area	Term
1	DEMGN802	EXPORT AND IMPORT MANAGEMENT	6	30	70	0	INTERNATIONAL BUSINESS	3/4
2	DEOPR512	INTERNATIONAL TRADE LOGISTICS	6	30	70	0	INTERNATIONAL BUSINESS	3/4
3	DEECO522	INTERNATIONAL ECONOMICS	6	30	70	0	INTERNATIONAL BUSINESS	3/4

DISCIPLINE SPECIFIC ELECTIVE 7 BASKET (DIGITAL MARKETING)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ETP	Elective Area	Term
1	DEMKT804	FOUNDATION OF DIGITAL MARKETING	6	30	70	0	DIGITAL MARKETING	3/4
2	DEMKT805	SOCIAL MEDIA MARKETING	6	30	70	0	DIGITAL MARKETING	3/4
3	DEMKT806	SEARCH ENGINE OPTIMIZATION	6	30	70	0	DIGITAL MARKETING	3/4

DISCIPLINE SPECIFIC ELECTIVE 8 BASKET (INFORMATION TECHNOLOGY)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ETP	Elective Area	Term
1	DECAP517	DATABASE MANAGEMENT SYSTEMS	6	30	40	30	INFORMATION TECHNOLOGY	3/4
2	DECAP399	MANAGING INFORMATION SYSTEMS	6	30	70	0	INFORMATION TECHNOLOGY	3/4
3	DECAP518	DATA ANALYTICS WITH PYTHON	6	30	40	30	INFORMATION TECHNOLOGY	3/4

DISCIPLINE SPECIFIC ELECTIVE 9 BASKET (BUSINESS ANALYTICS)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ET P	Elective Area	Term
1	DEMG551	SPREADSHEET MODELLING USING EXCEL	6	30	0	70	BUSINESS ANALYTICS	3/4
2	DEMG534	PREDICTIVE ANALYTICS	6	30	40	30	BUSINESS ANALYTICS	3/4
3	DEMKT507	WEB AND SOCIAL MEDIA ANALYTICS	6	30	0	70	BUSINESS ANALYTICS	3/4

DISCIPLINE SPECIFIC ELECTIVE 10 BASKET (BANKING AND FINANCE SERVICES)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ET P	Elective Area	Term
1	DEFIN530	CORPORATE BANKING	6	30	70	0	BANKING AND FINANCE	3/4
2	DEFIN811	FINANCIAL STATEMENT ANALYSIS AND CREDIT MANAGEMENT	6	30	70	0	BANKING AND FINANCE	3/4
3	DEFIN528	MANAGEMENT OF FINANCIAL SERVICES	6	30	70	0	BANKING AND FINANCE	3/4

DISCIPLINE SPECIFIC ELECTIVE 11 BASKET (LOGISTICS AND SUPPLY CHAIN MANAGEMENT)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ET P	Elective Area	Term
1	DEOPR513	INVENTORY MANAGEMENT	6	30	70	0	LOGISTICS AND SUPPLY CHAIN MANAGEMENT	3/4
2	DEOPR536	GLOBAL SUPPLY CHAIN	6	30	70	0	LOGISTICS AND SUPPLY CHAIN MANAGEMENT	3/4
3	DEOPR524	LOGISTICS MANAGEMENT	6	30	70	0	LOGISTICS AND SUPPLY CHAIN MANAGEMENT	3/4

DISCIPLINE SPECIFIC ELECTIVE 12 BASKET (HOSPITAL & HEALTHCARE MANAGEMENT)

S. No.	Course Code	Course Title	Cr.	CA	ETE	ET P	Elective Area	Term
1	DEHLT501	HEALTHCARE DELIVERY SYSTEMS AND PUBLIC HEALTH ADMINISTRATION	6	30	70	0	HOSPITAL & HEALTHCARE MANAGEMENT	3/4
2	DEHLT502	MEDICAL TERMINOLOGY AND MEDICAL RECORDS	6	30	70	0	HOSPITAL & HEALTHCARE MANAGEMENT	3/4
3	DEHLT607	QUALITY ASSURANCE IN HEALTHCARE	6	30	70	0	HOSPITAL & HEALTHCARE MANAGEMENT	3/4

GENERIC ELECTIVE (GE) BASKET (PICK ANY ONE AREA)

S. No.	Course Code	Course Title	Area	Cr.	CA	ETE	ETP	Term
1	DEPEA515	ANALYTICAL SKILLS-I	Professional Enhancement	4	30	70	0	3
2	DEPEA516	ANALYTICAL SKILLS-II	Professional Enhancement	4	30	70	0	4
3	DEENG539	ACADEMIC ENGLISH	English Language	4	30	70	0	3
4	DEENG514	INTRODUCTION TO THE STUDY OF LANGUAGE	English Language	4	30	70	0	4
5	DEENG519	POST-INDEPENDENCE INDIAN LITERATURE	English Literature	4	30	70	0	3
6	DEENG527	POST COLONIAL LITERATURES AND CULTURAL STUDIES	English Literature	4	30	70	0	4
7	DEPOL525	POLITICAL INSTITUTIONS IN INDIA	Political Science	4	30	70	0	3
8	DEPOL527	PUBLIC POLICY AND GOVERNANCE IN INDIA	Political Science	4	30	70	0	4
9	DESOC515	FUNDAMENTALS OF SOCIOLOGY	Sociology	4	30	70	0	3
10	DESOC506	GLOBALIZATION AND SOCIETY	Sociology	4	30	70	0	4

Note:

1. Students can adopt only one area from Generic Elective basket that will be applicable for the Generic Electives I and II.
2. In case of Discipline Specific Elective Basket, student may choose two areas, 3 courses from first area to be studied in term 3 and 3 courses from second area to be studied in term 4.
3. In case of Seminar on Summer Training, student may choose one course in lieu of Seminar on Summer Training from the Generic Basket 1 which is not chosen as GE.

Course code	DEACC506	Course Title	FINANCIAL REPORTING, STATEMENTS AND ANALYSIS
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Course Outcomes: Through this course, the student will be able to

CO1: associate accounting information for decision making in organizations.

CO2: analyse the cash position of an organization by evaluating cash flow from different activities.

CO3: identify various cost accounting techniques, cost concepts & techniques of cost control in decision making.

CO4: identify the accounting terminology and purpose of accounting framework.

CO5: evaluate how activity-based costing can be utilized in the organizations.

CO6: interpret the financial statements in accordance with generally accepted accounting principles.

Unit No.	Content
Unit 1	Introduction to Accounting: Introduction, Accounting Equation, Rules of Accounting, Objectives, Advantages and Limitations of Accounting, Accounting Concepts and Conventions, Accounting Terminology, Concept of IFRS and its relevance, Qualitative features of IFRS, Elements of financial statements, Difference between IFRS and GAAP.
Unit 2	Corporate Financial Statements: Features and Importance, Vertical Format of Corporate Financial Statements, Conceptual framework of depreciation and amortization
Unit 3	Ratio Analysis: Liquidity Ratios, Solvency Ratios, Profitability Ratios, Turnover Ratios, Du-Pont Analysis, Importance and Objectives.
Unit 4	Financial Statement Analysis: Objectives of Analysis, Various Stakeholders and their Interests, Techniques of Financial Statement Analysis-Horizontal Analysis, Common Size Analysis
Unit 5	Artificial Intelligence and Analytics: Finance and Accounting transformation by AI
Unit 6	Cash Flow Statement: Meaning and Significance, Construction of Cash Flow Statement, Analysis of Cash Flow Statement
Unit 7	Basic Aspects of Cost Accounting: Preparation of Cost Sheet and Estimated Cost Sheet, Meaning, Cost Concepts and Cost Classification
Unit 8	Budgetary Control: Need and Steps involved in Budgetary Control, Meaning and Types of Budgets, Preparation of Cash Budget, Preparation of Flexible Budget
Unit 9	Inventory Valuation: Methods of pricing material issues, FIFO, LIFO
Unit 10	Marginal Costing and Profit Planning: Meaning and Objectives, CVP Analysis, Break Even Point and Break Even Analysis
Unit 11	Decision involving Alternative Choices: Concept and Steps involved in Decision Making, Profit Planning, Key factor, Determination of Sales Mix, Make or Buy decision, Exploration of New Markets, Continue or Discontinue a Product Line.
Unit 12	Transfer Pricing: Meaning and Importance, Advantages and Limitations, Methods of Calculating Transfer Price
Unit 13	Activity Based Costing: Concept and Pre-requisites, Activity Based Costing versus Traditional Costing, Steps Involved in Activity Based Costing, Cost Drivers, Determination of Cost under ABC, Benefits and Limitations
Unit 14	Responsibility Accounting: Concept and Significance, Elements, Responsibility Centers.

READINGS:

1. MANAGEMENT ACCOUNTING by KHAN M.Y and JAIN P.K, MCGRAW HILL EDUCATION
2. FUNDAMENTALS OF COST ACCOUNTING by WILLIAM N. LANEN, SHANNON W. ANDERSON, MICHAEL W. MAHER, MCGRAW HILL EDUCATION

3. MANAGEMENT ACCOUNTING by SHAH PARESH, OXFORD UNIVERSITY PRESS
4. A TEXTBOOK OF ACCOUNTING FOR MANAGEMENT by MAHESHWARI. S.N, MAHESHWARI SHARAD.K, MAHESHWARI SUNEEL.K, VIKAS PUBLISHING HOUSE
5. ACCOUNTING FOR DECISION MAKING by NEEDLES BELVERD. E, CENGAGE LEARNING
6. FINANCIAL ACCOUNTING FOR MANAGEMENT: AN ANALYTICAL PERSPECTIVE by GUPTA AMBRISH, PEARSON

Course code	DEECO515	Course Title	MANAGERIAL ECONOMICS
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

C01: apply economic principles to management decisions.

C02: evaluate the managerial decisions making around the theory of the firm with application in a globalized economy.

C03: evaluate possible strategies in the event a firm is one of just a few companies in a market.

C04: examine a comprehensive understanding of the current issues influencing economic development of India.

Unit No.	Content
Unit 1	Nature and Scope of Managerial Economics: definition and scope of managerial economics, basic process of decision making in economics, existence of firm and its functions
Unit 2	Demand and supply analysis: determinants of demand and supply, individual and market demand and supply, market equilibrium
Unit 3	Demand Estimation: relevance of demand estimation for a firm, demand forecasting using qualitative forecast and time series analysis
Unit 4	Cost Theory and Estimation: short run cost functions, long run cost curves, economics of scale, learning curves
Unit 5	Production Theory: production function with one and two variables inputs, optimal combination of inputs, returns to scale
Unit 6	Market Structure: introduction to market structure, price and output determination under perfect competition, monopoly and monopolistic competition
Unit 7	Oligopoly: meaning and sources, cartelization and price leadership under oligopoly
Unit 8	Game Theory: meaning and types of games, dominant strategy and Nash equilibrium, prisoner's dilemma, mixed strategy
Unit 9	Indian Economy Since Colonialism: colonialism and development of the Indian economy, trends and composition of national income
Unit 10	Human Development: human development index, characteristics of developing world, state of human development in India
Unit 11	Structure of Indian Economy: introduction to agriculture, industrial sector and service sector, poverty and inequality, emerging energy-economy-environment regulatory framework
Unit 12	Economic Reforms: introduction to reforms, economic reforms for financial sector performance, agriculture, industry and services
Unit 13	Monetary Policy: concept and meaning, objectives, tools of monetary, role of monetary policy after the period of economic reforms, inflation and monetary policy
Unit 14	Fiscal policy: concept and meaning, objectives, tools of fiscal policy, role of fiscal policy after the period of economic reforms, inflation and fiscal policy

READINGS:

1. MANAGERIAL ECONOMICS- PRINCIPLES AND WORLDWIDE APPLICATIONS by SALVATORE, DOMINICK and RASTOGI, SIDDHARTHA K., OXFORD UNIVERSITY PRESS.
2. INDIAN ECONOMY by GAURAV DUTT, ASHWANI MAHAJAN, S. CHAND PUBLISHING
3. MANAGERIAL ECONOMICS: AN INTEGRATIVE APPROACH by HIRSHEY, MARK, CENGAGE LEARNING
4. INDIAN ECONOMY PERFORMANCE AND POLICIES, by UMA KAPILA, ACADEMIC FOUNDATION

Course code	DEMGN578	Course Title	INTERNATIONAL BUSINESS ENVIRONMENT
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

C01: analyze business environment and trends to take decisions with respect to international business operations.

C02: interpret and apply international trade theories in international business operations.

C03: identify and critically analyse the role of foreign exchange market and usage of fundamental instruments for currency exchange.

C04: develop skills on analysing the business data, and problem solving in other functional areas such as marketing, business strategy and human resources.

C05: develop responsiveness to contextual social issues/ problems and exploring solutions, understanding business ethics and resolving ethical dilemmas.

C06: identify aspects of the global business and cross-cultural understanding.

Unit No.	Content
Unit 1	Overview of international business environment: Introduction to international business, types of international business, globalization and international Business;
Unit 2	Components of international Business environment: social environment, political and legal environment, economic environment, technological environment
Unit 3	The external environment and challenges: assessing risk in international business, Recent world trade and foreign Investment trends, environment Influence on Trade and investment patterns
Unit 4	International Trade theories: theory of absolute advantage, theory of comparative advantage, factor proportion theory, the diamond model of national competitive advantage, factor mobility theory
Unit 5	Protectionism and trading environment: Globalization trends and challenges; environment for foreign trade and investment, governmental influence on trade and investments; tariff and non-tariff barriers
Unit 6	Economic Integration and Co-operation: cross national cooperation and agreements, Role of international organizations: WTO, IMF, Regional Economic Integrations
Unit 7	International financial markets: foreign exchange market mechanism, exchange rate arrangement, determinants of exchange Rates, exchange rate movements and their impact
Unit 8	Global Debt and Equity Markets: Euro Currency market, offshore financial centres, International Banks, Non-Banking Financial Service firms; stock markets
Unit 9	Global Competitiveness: Export Management, Technology and global Competition, world economic growth and the environment
Unit 10	Internationalization strategies: Theories of internationalization, Modes of operations in International Business, export and import strategy
Unit 11	Forms and Ownership of Foreign Production: Types of collaborative arrangements; Licensing, joint ventures & consortium approaches, Managing International Collaborations
Unit 12	International business diplomacy: Negotiating an International business, issues in asset protection, Multilateral sentiments
Unit 13	Country evaluation and selection: Opportunity and risk matrix, analysis of Macro and micro indicators, country comparison tools

Unit 14	Globalization and society: globalization with social responsibility, Ethical Dimensions of Labor Conditions, Ethics and the Environment, legislation for anti-competitive and unfair trade practices
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READINGS:

1. DANIELS, RADEBAUGH, SULLIVAN & SALWAN, INTERNATIONAL BUSINESS ENVIRONMENTS AND OPERATIONS by PEARSON
2. INTERNATIONAL BUSINESS - COMPETING IN THE GLOBAL MARKETPLACE by CHARLES W HILL, ARUN KUMAR JAIN, MCGRAW HILL

Course code	DEMKT503	Course Title	MARKETING MANAGEMENT
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

CO1: analyze and respond to environmental and competitive changes, their impact on marketing planning, strategies and practices.

CO2: apply the conceptual frameworks, theory and techniques to various marketing contexts.

CO3: prepare marketing and sales plan appropriate to the needs of customers and contexts.

CO4: determine strategies for developing new products and services that are consistent with evolving market needs.

Unit No.	Content
Unit-1	Introduction: market and marketing, definition, nature and scope of marketing, exchange process, functions of marketing, core marketing concepts
Unit-2	Marketing orientations: evolution of modern marketing concept, holistic marketing concepts, new marketing orientations selling vs. marketing
Unit-3	Marketing mix: 7 P's & 7 C's of Marketing, 4 A's of Marketing, customer quality, value and satisfaction, Michael E. Porters chain analysis model
Unit-4	Marketing environment: Significance of scanning marketing environment; Analysis of macro environment of marketing – economic, demographic, socio-cultural, technological, political legal and ecological; Impact of micro and macro environment on marketing decisions
Unit-5	Consumer behaviour: buyer behaviour, different consumer roles, need for studying buyer behaviour, different buying motives, consumer buying decision process and influences, consumer vs. business buying behaviour, industrial buying process
Unit-6	Segmentation decisions: market segmentation, characteristics of a segment, bases for segmenting a consumer market, levels of market segmentation, factors influencing selection of market segments
Unit-7	Targeting and positioning: Benefits of market segmentation; Criteria for effective market segmentation; Target market selection and strategies; Positioning – concept, bases and process
Unit-8	Product decisions: concept and classification, layers of products, major product decisions, product-mix, new product development stages, packaging and labelling, product life cycle (PLC) – concept and appropriate strategies adopted at different stages
Unit-9	Pricing decisions: pricing – objectives, price sensitivity, factors affecting price of a product, pricing methods and strategies, ethical issues in product and pricing decisions
Unit-10	Distribution planning: channels of distribution – concept and importance, different types of distribution middlemen and their functions, selection, motivation and performance appraisal of distribution middlemen
Unit-11	Distribution decisions: decisions involved in setting up the channel, channel management strategies, distribution logistics – concept, importance and major logistics decisions, channel integration and systems, ethical issues in distribution decisions
Unit-12	Distribution decisions: retailing and wholesaling, types of retail formats, retail theories, retailing strategies, non-Store retailing, wholesaling – nature and importance, types of wholesalers, developments in retailing and wholesaling in Indian perspective

Unit-13	Promotion decisions: role of promotion in marketing, promotion mix, integrated marketing communication, concept, communication process and promotion, determining promotion mix, factors influencing promotion mix, developing promotion campaigns, sales promotion, direct marketing, public relations, digital and social media
Unit-14	Trends in marketing: service Marketing, e-marketing, green marketing, customer relationship management, rural marketing, other emerging trends, ethical issues in marketing

READINGS:

1. MARKETING MANAGEMENT by KOTLER, P. & KELLER, K. L. (2017), PEARSON
2. BASIC MARKETING by MCCARTHY, E. J., CANNON, J. & PERREAULT, W. (2014). MCGRAW-HILL EDUCATION
3. MARKETING CONCEPTS AND CASES by ETZEL, M. J., WALKER, B. J., STATON, W. J., & PANDIT, A. (2010), TATA MCGRAW HILL

Course Code	DEMG581	Course Title	ORGANISATIONAL BEHAVIOUR AND HUMAN RESOURCE DYNAMICS
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

C01: enumerate the concept of management practices and organizational behavior.

C02: develop and sharpen acumen of how different management thoughts can be used to improve organization functioning.

C03: analyze the importance of management practices and important organizational behavior dimensions at different levels of organization.

C04: appraise the dynamics of industrial relations and to manage them as per statutory regulations.

C05: apply human resource management functions to handle emerging issues.

Unit No.	Content
Unit-1	Organizational behavior: relationship between management and organization behavior, model of OB and contributing disciplines to the OB field Foundations of individual behavior: values, attitude and job satisfaction, theories of learning and behavior modification
Unit-2	Personality: theories of personality and its assessment, transactional analysis and attribution theory of perception Emotions: emotional intelligence and affective events theory of emotion Motivation: early and contemporary theories of motivation
Unit-3	Group dynamics: group dynamics and its significance, types of groups, formation and stages of group development, group performance factors Team development: team formation, its types and difference between group and team
Unit-4	Organizational conflict and negotiations: conflict sources, types and levels of conflict, traditional and modern approaches to conflict, resolution of conflict through negotiation Stress: sources and consequences of stress, stress management techniques
Unit-5	Introduction: External and Internal Forces of environment affecting HRM, Objectives and functions of HRM. Human Resource Planning: HRP process, Barriers and Prerequisites for Successful HRP.
Unit-6	Job Analysis: Methods of Collecting Job Data, Potential Problems with Job Analysis, Process of Job Analysis, Job Design and its approaches
Unit-7	Recruitment & Selection: Meaning, Recruitment process, Recruitment Methods, Challenges in India and Selection Process
Unit-8	Talent Management: talent management, talent retention, talent acquisition and sources of talent acquisition Orientation, induction and placement: process of orientation, induction and placement programme, Evaluation of Orientation Programme
Unit-9	Training and Development: employee training, difference in training and development, methods of training, methods of management development, people capability maturity model
Unit-10	Career planning and management: career management, process of career planning, challenges in career planning.
Unit-11	Performance management system: performance management, performance planning, performance appraisal, potential appraisal, feedback and counselling.
Unit-12	Compensation management: types and theories of compensation, concept of wages, factors influencing compensation management, incentives and fringe benefits, employee

	engagement and retention.
Unit-13	Managing industrial relations: major actors and their roles in IR, factors influencing IR, approaches to IR, grievance handling procedure
Unit-14	Industrial Disputes: industrial disputes, methods of settlement of industrial disputes, trade unions and their challenges in India

READINGS:

1. ORGANIZATIONAL BEHAVIOUR by STEPHEN P. ROBBINS. TIMOTHY A. JUDGE. NEHARIKA VOHRA, PEARSON
2. MANAGEMENT by MANAGEMENT by STEPHEN P. ROBBINS. MARY COULTER. NEHARIKA VOHRA, PEARSON
3. HUMAN RESOURCE MANAGEMENT by DESSLER, G. AND VARKEY, B, PEARSON

Course Code	DEFIN542	Course Title	CORPORATE FINANCE
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

CO1: understanding finance function with respect to its evolution and growth.

CO2: understanding the concept of Time Value of Money and interpreting the results based on calculations.

CO3: analyzing financing needs of the businesses and designing an optimum capital structure.

CO4: understanding the retention and distribution of profits and impact on business valuation.

Unit No.	Content
Unit-1	Financial Management: overview, evolution of finance, the basic goal: creating shareholder value, agency issues, business ethics and social responsibility.
Unit-2	Sources of Finance: long-term and short-term sources of finance- ordinary shares, preferences shares, redeemable irredeemable debentures, Debt vs. Equity.
Unit-3	Money Market Instruments: treasury bills, commercial papers, certificate of deposits, treasury management and treasury operations in corporate. external commercial borrowings, financing for MSMEs
Unit-4	Time Value of Money concept: compounding and discounting, future value and present value, annuities, effective interest rates.
Unit-5	Investment Decisions: capital budgeting decisions, rationale of capital budgeting, non-discounting capital budgeting techniques - payback period, profitability index, accounting rate of return.
Unit-6	Investment Decisions: discounting techniques of capital budgeting - NPV, IRR, discounting payback period method, estimation of cash flows, NPV v/s IRR, risk analysis in capital budgeting - sensitivity analysis, certainty equivalent approach.
Unit-7	Cost of Capital: meaning and concept, cost of debt, cost of equity, cost of retained earnings, calculation of WACC, international dimensions in cost of capital.
Unit-8	Financing Decisions: capital structure, theories and value of the firm - net income approach, net operating income approach, traditional approach, Modigliani miller model, determining the optimal capital structure, checklist for capital structure decisions, costs of bankruptcy and financial distress.
Unit-9	EBIT-EPS Analysis: concept of leverage, types of leverage: operating leverage, financial leverage, combined leverage.
Unit-10	Dividend Decisions: factors determining dividend policy, theories of dividend Gordon model, Walter model, MM Hypothesis.
Unit-11	Forms of Dividend: cash dividend, bonus shares, stock split, stock repurchase, dividend policies in practice.
Unit-12	Working Capital Management: working capital policies, risk-return trade-off, cash management, receivables management.
Unit-13	Corporate Governance: value-based corporate culture, disclosures, transparency and accountability, corporate governance and human resource management, evaluation of performance of board of directors, succession planning, public sector undertakings and corporate governance, Insider trading, Lessons from corporate failure.
Unit-14	Economic outlook and Business Valuation: impact of changing business environment on corporate valuation, climate change and corporate valuation, business sustainability and corporate valuation, role of environmental, social, and governance (ESG) factors in corporate valuation.

READINGS:

1. FUNDAMENTALS OF CORPORATE FINANCE by JONATHAN BERK, PETER DEMARZO & JARRED HARDFORD, PEARSON
2. CORPORATE FINANCE by STEPHEN A. ROSS, RANDOLPH W. WESTERFIELD & JEFFREY JAFFE, MCGRAW HILL

Course Code	DEOPR639	Course Title	OPERATIONS MANAGEMENT AND RESEARCH
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

C01: analyze how to optimally utilize the resources.

C02: apply the concepts in solving real life problems.

C03: adapt different opinions and make correct judgment.

C04: apply mathematical models to a given problem.

C05: analyze the various decision-making environments and the tools applicable to them.

Unit No.	Contents
Unit- 1	Introduction to Operations Management and Research: introduction and scope of operation management, emerging issues in operations management, history of operations research, definitions and features of operations research approach, models and modelling in operations research, applications of operations research
Unit- 2	Forecasting: introduction, features and elements of forecasting, forecast based on judgment and opinion, forecast based on time-series data, associative forecasting techniques, concept of forecasting errors
Unit- 3	Design and layout: production of goods versus delivery of services, product-process matrix, design process, product design, service design, process types, product and service profiling, automation, facility layout, line balancing
Unit- 4	Location planning and analysis: need and nature of location decisions, factors that affect location decisions, evaluating location alternatives
Unit- 5	Management of quality: defining quality-dimensions of quality, determinants of quality, the cost of quality, quality tools, total quality management, inspection, control charts for variables (mean and range chart), control charts for attributes (p-chart, c-chart), run test
Unit- 6	Planning: Aggregate Production Planning; Master Production Schedule and MRP, MRP-II, ERP
Unit- 7	Inventory management: nature and importance of inventories, inventory counting systems and inventory costs, economic production quantity, quantity discounts, EOQ model
Unit- 8	Supply chain management: need, elements, and benefit of effective SCM, logistics and reverse logistics, requirements, and steps for creating an effective supply chain, lean vs. agile supply chains
Unit- 9	JIT and lean operations: goals and building blocks of lean systems
Unit- 10	Linear Programming: general mathematical model of linear programming, linear programming formulation, graphical solution, simplex method, Big M method, special cases
Unit- 11	Assignment and transportation problem: Hungarian Assignment Model (HAM), special cases in assignment problem, Initial Basic Feasible Solution (IBFS) i.e. NWCM, LCM and VAM Method, optimization using stepping stone and MODI, special cases including concept of degeneracy
Unit- 12	Project Management and Queuing Theory: difference between PERT and CPM, PERT problem with three time estimates and concept of probability, basic concepts and parameters of a queuing model, m/m/1 model characteristics
Unit- 13	Game Theory: basics, saddle point, mixed strategies including odds, dominance, sub games and graphical method

Unit- 14	Decision Theory: basics including decision making environments, decision making under risk, expected value of perfect information, decision making under uncertainty, concept of decision trees, decision tree analysis
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READINGS:

1. OPERATIONS MANAGEMENT by WILLIAM J STEVENSON, MCGRAW HILL EDUCATION
2. OPERATIONS MANAGEMENT by NORMAN GAITHER, GREGORY FRAZIER, CENGAGE LEARNING

Course code	DEMGN801	Course Title	BUSINESS ANALYTICS
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

CO1: apply quantitative modelling and data analysis techniques to problems of the real world.

CO2: employ best practices in data visualization to develop charts, maps, tables, and other visual representations techniques to communicate findings to diverse audiences.

CO3: identify and describe complex business problems in terms of analytical models.

CO4: apply appropriate analytical methods to find solutions to business problems that achieve stated objective.

Unit No.	Content
Unit 1	Business analytics and summarizing business data: Overview of business analytics: scope, application, R-studio environment for business analytics, basics of R: packages, vectors, datatypes and data structures
Unit 2	Summarizing business data: One variable and two variables statistics, concept of pipes operator, functions to summarize variables: select, filter, mutate, arrange, summarize and group by
Unit 3	Business data visualization: Basic graphs: bar-graph, line-chart, histogram, box and scatterplot, advanced data visualization: graphics for correlation, deviation, ranking, distribution and composition
Unit 4	Business forecasting using time series: Time series modelling, exploration of time series data using R, ARIMA, GARCH, VAR methodologies for time series analysis
Unit 5	Business prediction using generalised linear models: Logistic regression and statistical inference with application, survival analysis and its application
Unit 6	Machine learning for businesses: Supervised models: K-NN and decision trees, unsupervised models: K-means and hierarchical clustering, classification and prediction accuracy
Unit 7	Text analytics for business: Creating and refining text data, inferences through graphs, topic modelling and TDM analysis, sentiment analysis
Unit 8	Business intelligence: Introduction to business intelligence, role of data and data base management, role of data mining in business strategy
Unit 9	Data visualization: Role of visualization in business intelligence, introduction to charts, graphs and maps
Unit 10	Data environment and preparation: Managing metadata, extracts and live data, cross database joints and union
Unit 11	Data blending: Data prep with text and excel files, understating data types, extracting data from various file formats
Unit 12	Design fundamentals and visual analytics: Filters, sorting, groups and sets, interactive filters, forecasting, use of tooltip, reference line, parameter, drill down and hierarchies
Unit 13	Decision analytics and calculations: Types of calculations, logic calculations (including if comment, nested if command etc.), data calculations, string calculations
Unit 14	Mapping: Role of maps in business intelligence and visualization, editing unrecognized locations

READINGS:

1. R FOR EVERYONE: ADVANCED ANALYTICS AND GRAPHICS by JARED P. LANDER, PEARSON
2. VISUAL DATA STORYTELLING WITH TABLEAU by LINDY RYAN, PEARSON
3. TEXT MINING WITH R: A TIDY APPROACH by JULIA SILGE AND DAVID ROBINS, SHROFF PUBLISHERS & DISTRIBUTORS PVT. LTD
4. MASTERING TABLEAU by DAVID BALDWIN AND MARLEEN MEIER, PACKT PUBLISHING

Course code	DEMGN832	Course Title	RESEARCH METHODOLOGY
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

C01: identify critical thinking and scientific approaches to formulate research problems.

C02: describe research design approaches, methods and conceptual differences to apply across different research contexts.

C03: generalize familiarity with a phenomenon or to achieve new insights into it.

C04: interpret results generated from data analysis and report the findings.

Unit No.	Content
Unit 1	Background of research- Developing research proposals, research paradigms- contributions of research to theory and practice and research ethics
Unit 2	An introduction to research- Meaning, process, defining, research problem: selection, understanding and necessity of defined problem, research design, need and types of Research Design
Unit 3	Reviewing literature- Identifying, accessing and managing sources of information and scholarly literature, academic writing and referencing and steps in literature review development
Unit 4	Types of data in research- Primary and secondary data and sources, nature of qualitative and quantitative research, data and variables used in qualitative and quantitative methods, writing up qualitative research
Unit 5	Sampling design- Sampling design process, characteristics of good sample, types of sampling design, sampling techniques- random and non-random
Unit 6	Measurement and scaling technique: Tools of sound measurement, techniques of developing measurement tools, scaling meaning and important scaling techniques, statistical properties of different scales
Unit 7	Data collection methods- Observation, experimentation and survey methods, questionnaire: introduction, design process and coding the questionnaire
Unit 8	Descriptive statistics and time series- Measures for central tendency- ungrouped and ungrouped data, dispersion and distribution, index number and time series analysis
Unit 9	Hypothesis testing- Hypothesis definition and process, types and hypothesis testing procedure for t and z tests differences for single, two populations and paired sample
Unit 10	Test of association- Correlation coefficient- Spearman rank and Karl's Pearson and test of association between nominal data- Chi-square test
Unit 11	Analysis of Variance (ANOVA) and prediction techniques- Analysis of variance for mean difference, reliability and validity, bivariate regression and multiple regression analysis
Unit 12	Multivariate analysis- Classification, important methods of factor analysis, factor analysis procedure, rotation in factor analysis, overview of cluster analysis, discriminant analysis, multi-dimensional scaling and conjoint analysis
Unit 13	Reporting a quantitative study- Technique and precaution of interpretation, significance of report writing, layout and types of report
Unit 14	Writing research proposals- Purpose, nature and evaluation-Content and format-Practical considerations-timelines, budgets, supervision management- Presentation and defense of proposals

READINGS

1. BUSINESS RESEARCH METHODS by NAVAL BAJPAI, PEARSON
2. MARKETING RESEARCH by NARESH K MALHOTRA, PEARSON
3. MARKETING RESEARCH: TEXT AND CASES by NARGUNDKAR, R., MCGRAW HILL EDUCATION

Course code	DEBSL605	Course Title	LEGAL ASPECTS OF BUSINESS
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

C01: apply the statutory provisions related to the Contract Act and Sales of Goods Act in business organizations.

C02: use legal rights and remedies by applying the provisions related to Consumer and Intellectual Property Rights.

C03: analyze the legal issues related to Negotiable Instruments

C04: interpret the legal implications of FEMA and Competition Act in designing various business policies and strategies.

C05: develop the understanding of Company form of business organization from its incorporation to winding up.

Unit No.	Content
Unit 1	Indian Contract Act, 1872: essentials of contract, kinds of contract, free consent, discharge of contract, breach of contract
Unit 2	Sale of Goods Act, 1930: contract of sale, conditions and warranties, rights of unpaid seller
Unit 3	Consumer Protection Act 2019: introduction and objectives, rights of consumers, redressal machinery
Unit 4	Intellectual Property Rights: patents, copyrights, trademarks, trade secrets, geographical indications, traditional knowledge, digital library, intellectual property infringement
Unit 5	Negotiable Instruments Act, 1881: characteristics and kinds of Negotiable Instruments, comparison between promissory note, bill of exchange and cheque
Unit 6	FEMA Act, 1999: introduction, definitions, regulation and management of Foreign Exchange
Unit 7	Competition Act, 2002: definitions, anti-competitive agreements, abuse of dominant position, Combinations
Unit 8	Companies Act, 2013 (preliminary): company and its characteristics, kinds of companies, limited liability partnership, formation of a company
Unit 9	Company Documents: Memorandum of Association, Articles of Association, Doctrine of constructive Notice, Doctrine of Indoor management
Unit 10	Prospectus: types of prospectus, legal consequences of misstatement in prospectus
Unit 11	Raising of Capital: Share and share capital, Alteration of share capital, Borrowing powers and charges
Unit 12	Company Management: appointment and removal of directors
Unit 13	Company Meetings: essentials of a valid meeting and types of meeting
Unit 14	Company winding up: modes of winding up under IBC Act and compulsory winding up under Companies Act, 2013

READINGS:

1. ELEMENTS OF BUSINESS LAW by N.D KAPOOR, SULTAN CHAND & SONS (P) LTD.
2. A TEXTBOOK OF COMPANY LAW by P. P. S. GOGNA, S CHAND PUBLISHING
3. A HANDBOOK ON CORPORATE AND OTHER LAWS by CA CS MUNISH BHANDARI,

BESTWORD PUBLICATIONS PVT. LTD.

4. LEGAL ASPECTS OF BUSINESS: CONCEPTS AND APPLICATIONS by PARUL GUPTA,
VIKAS PUBLISHING HOUSE

Course code	DEPEL537	Course Title	COMMUNICATION FOR LEADERS
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

C01: develop critical thinking skills employed in small groups and public speaking.

C02: compose business communication documents with structural precision and verbal accuracy.

C03: formulate business queries and respond to any reason related to the business situation.

C04: use semantic and syntactic structure as per the advanced level of Common European Framework.

C05: employ their reading speed and comprehension of business articles.

C06: demonstrate consistent and appropriate language use in extended conversations and discussions.

Unit No.	Content
Unit 1	Listening- understanding vocabulary and context: matching phrases and words with definitions, taking notes and completing them, understanding phrases and expressions in context
Unit 2	Listening for Details: filling missing details, interpreting listening tracks, identifying key and supporting ideas, taking detailed notes on information
Unit 3	Tenses, Clauses and transitional words or phrases: usage of defining and non-defining relative clauses, pronoun problems, usage of as or like, future time clauses, usage of tenses, infinitives, reference devices, position of adverbs, transitional markers,
Unit 4	Sentences: cleft sentences, synthesis of sentences, complex sentences, conditional sentences, alternatives to if
Unit 5	Vocabulary: one word substitution for a definition, abbreviations, antonyms, synonyms, connotative and denotative meanings, contextual use of words and phrases, substitution, collocation, concession words and phrases
Unit 6	Idioms and Proverbs: phrasal verbs, meaning and usage of idioms and proverbs, formal and informal usage of language
Unit 7	Reading Skills: types of texts – narrative, descriptive, extrapolative, essential skills for reading comprehension – decoding, fluency, vocabulary, reasoning and background knowledge, reading techniques
Unit 8	Comprehension Skills: identifying errors and superfluous words, identifying co-relation of sentences and paragraphs, finding supporting ideas, identifying purpose, different strategies of comprehension, reading texts of different genres and of varying length, reading and interpreting non-linguistic texts, reading and understanding incomplete texts
Unit 9	Group Discussion: brainstorming ideas, taking stance, working in groups and enacting roles, showing agreement and disagreements, discussing possible scenarios, discussing various business possibilities, argument building for persuasion
Unit 10	Presentation Skills: do's and don'ts of presentation skills, presenting information and business proposals, making a short talk
Unit 11	Role Play and debate: useful vocabulary and phrases, assuming and reacting in different business scenarios, interviewing a partner, debate, group-forecasting, negotiation skills, debating pros and cons of a business decision
Unit 12	Writing Techniques and Strategies: types of writing, cohesion and coherence, expansion of ideas, thesis sentence, expansion of given sentence, reorganizing jumbled sentences into a coherent paragraphing, writing style and techniques
Unit 13	Writing: summarizing, explanation of points, paragraph writing, précis writing, essay

	writing
Unit 14	Business Correspondence: formats of business correspondence, writing and replying to memo, notice, note, letter, report, and proposal

READINGS:

1. BUSINESS BENCHMARK- ADVANCED by GUY BROOK- HART, CAMBRIDGE PUBLICATIONS
2. ADVANCED ENGLISH GRAMMAR by MARTIN HEWINGS, CAMBRIDGE UNIVERSITY PRESS
3. THE MCGRAW-HILL HANDBOOK OF ENGLISH GRAMMAR AND USAGE by MARK LESTER, LARRY BEASON, MC GRAW HILL

Course code	DEMGN571	Course Title	CORPORATE STRATEGY AND ENTREPRENEURSHIP
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

- C01:** integrate understanding of functional aspects of management and explore their contribution to strategic management within organizations.
- C02:** appraise the importance of environmental and industry analysis in formulating strategy.
- C03:** analyze the role of marketing, accounting, finance, operations management and human resource management in strategy formulation.
- C04:** evaluate strategic alternatives.
- C05:** evaluate the role of leadership, organizational structure and organizational culture in strategy Implementation.
- C06:** develop marketing plan, operations plan, HR plan and financial plan for new business ventures.

Unit No.	Content
Unit-1	Overview of strategic management: Strategic management, dimensions of strategic decisions, benefits of strategic management, strategy, strategic management process, mission, vision
Unit-2	External & Internal analysis: Firm's external environment, remote environment, industry environment, operating environment, SWOT analysis, internal factors, external factors, discovering core competencies, value chain, resource-based view, the internal analysis tool- Vrio framework, benchmarking, types of benchmarking, external factor evaluation matrix, internal factor evaluation matrix, competitive profile matrix
Unit-3	Corporate level strategies: Growth strategy, integration strategy, diversification strategy, turnaround strategy, defensive strategy
Unit-4	International strategy: Globalization, global strategic management, strategic orientations of global firms, competitive strategies in foreign market, management contracts, turnkey operations, equity alliance, globalization & India
Unit-5	Business level strategies: Business level strategies/generic strategies, evaluating & choosing business strategies, dominant product/service building value
Unit-6	Multi-business strategy & strategy implementation: Portfolio strategy, the synergy approach, parenting approach, patching approach, strategy implementation, organization culture
Unit-7	Evaluation, control & contemporary issues: Strategic evaluation & control, balanced scorecard, corporate governance, business ethics, social responsibility, environmental sustainability
Unit-8	Strategic management and entrepreneurship: Strategic management for start-ups, strategies for growing and maturing businesses, strategies for technology-oriented businesses
Unit-9	Latest trends in entrepreneurship: Social entrepreneurship, intrapreneurship, women entrepreneur, challenges and strategic solutions for problems faced by entrepreneurs in India

Unit-10	Overview of business plan: Components of a business plan, business ideas, business ideas selection, feasibility study, legalities involved for business plan, forms of ownership, SWOT analysis
Unit-11	Strategic marketing plan: Market segmentation, targeting & positioning, marketing mix, product mix, promotions mix, marketing communication, pricing strategies
Unit-12	Strategic operations plan: Operations plan, people and suppliers, manufacturing or outsourcing, plant location, plant layout, inventory management
Unit-13	Strategic human resources plan: Manpower planning, organizational structure, recruitment & selection, training & development, motivational techniques, performance appraisal
Unit-14	Strategic financial plan: Types of industrial finance, working capital, breakeven analysis, balance sheet, cash flow statement, payback period, return on investment

READINGS:

1. STRATEGIC MANAGEMENT by JOHN PEARCE II, RICHARD B ROBINSON, AMITA MITAL, MCGRAW HILL EDUCATION
2. ENTREPRENEURSHIP by ROBERT D HISRICH, MICHAEL P PETERS AND DEAN A. SHEPHERD, MCGRAW HILL EDUCATION

Course code	DEMKT529	Course Title	CONSUMER BEHAVIOR
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

- CO1: understand the implications of consumer behavior concepts & theories for businesses and wider society.
- CO2: discern how individuals and groups influence consumer behavior, and how marketers utilize this knowledge to help achieve organizational objectives.
- CO3: analyze the dynamic interplay of internal and external factors influencing consumer behavior and accordingly develop a marketing strategy.
- CO4: articulate practical and comprehensive managerial understanding of consumer behavior.
- CO5: develop the understanding of marketing regulation, consumer protection act and contemporary issues in consumer behaviour.

Unit No.	Content
Unit 1	Consumer Behavior and Marketing strategy: consumer behaviour, market strategy and applications of consumer behavior.
Unit 2	Market Analysis and Consumer Decisions: market analysis components, segmentation strategy and consumer decisions and consumer behavior models.
Unit 3	Culture and Group influence: cultural and group influence on consumer behavior, concept of culture, cross cultural marketing strategy, the household life cycle and marketing strategy.
Unit 4	Groups, Reference Group and Diffusion of Innovation: groups, types of groups, reference group influence on consumption process & marketing strategies and diffusion of innovation.
Unit 5	Perception: perception, exposure, attention and interpretation, perception and marketing strategy.
Unit 6	Learning and Personality: memory's role in learning, learning theories, brand image and product positioning, brand equity and brand leverage motivation, personality and emotion.
Unit 7	Motivation and Emotion: motivation theory and marketing strategy use of personality in marketing practice, emotions and marketing strategy.
Unit 8	Attitude and Market Segmentation: attitude, influencing attitude, attitude components and change strategies, market segmentation and product development strategies based on attitudes.
Unit 9	Self-Concept and Consumer Decisions: nature of lifestyle, the VALS system consumer decision process and types of consumer decisions.
Unit 10	Consumer Decision Making Process: process of problem recognition and uncontrollable determinants of problem recognition, marketing strategy and problem recognition, marketing strategies based on information search.
Unit 11	Alternative Evaluation: alternative evaluation and selection, types and sources of information, consumer decision making and evaluation criteria.
Unit 12	Decision Rules and Attributes of consumers: decision rules for attitude based choices, attributes affecting retail outlet selection, consumer characteristics and outlet choice, in-store and online influence on brand choice and evaluation criteria.
Unit 13	Post purchase Processes and Dissonance: post purchase processes, post purchase dissonance, product use and non-use, disposition.

Unit 14	Purchase Evaluation and Customer Satisfaction: purchase evaluation, customer satisfaction, dissatisfaction responses, repeat purchase and customer commitment.
Unit 15	Consumer Behavior and Marketing Regulation: regulation and marketing to children, regulation and marketing to adults, consumer protection act and contemporary issues in consumer behavior.
Unit 16	Consumer Behaviour and Rural markets: consumer behaviour research in rural areas, dynamics of the rural consumer, consumer buying process in rural markets, model of rural consumer behavior
Unit 17	Consumer Behaviour and the Retail Sector: Indian retail scenario, Techniques for Understanding Retail Shopper Behaviour, understanding the retail customer.
Unit 18	Consumer Behaviour and Behavioural Data Analysis: implications of consumer behaviour for marketing strategy, opinion leadership, consumer behaviour for non-profit organisations, government agencies or consumer groups, consumer behaviour data analytics.
Unit 19	Emerging trends in Consumer Behaviour: emerging customer expectations, personalized marketing.
Unit 20	Caselets: Caselets in consumer behaviour.

READINGS:

1. CONSUMER BEHAVIOR- BUILDING MARKETING STRATEGY by DEL I HAWKINS, DAVID L MOTHERSBAUGH, & AMIT MOOKERJEE, MCGRAW HILL EDUCATION
2. CONSUMER BEHAVIOR by KUMAR, S. R., SCHIFFMAN, L.G., WISENBLIT J., PEARSON
3. CONSUMER BEHAVIOR by RAJNEESH KRISHNA, OXFORD UNIVERSITY PRESS.
4. CONSUMER BEHAVIOR by SCHIFFMAN, L. G., &KANUK, L. L., NEW DELHI, PRENTICE HALL.

Course code	DEMKT525	Course Title	DIGITAL AND SOCIAL MEDIA MARKETING
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

CO1: define social media marketing goal setting necessary to achieve successful online campaigns.

CO2: describe the stages of the social media marketing strategy development process.

CO3: develop effective social media marketing strategies for various types of industries.

CO4: devise an integrated social media marketing strategy using a variety of services, tools and platforms to accomplish marketing objectives.

CO5: analyze the progress in achieving social media goals with a variety of powerful measurement tools, services, and metrics.

Unit No.	Content
Unit 1	Evolution of Digital Marketing - The Digital Consumer & Communities Online, Digital Marketing Landscape.
Unit 2	Search Engine Marketing - Pay Per Click (PPC) and Online Advertising, Search Engine Optimization and Search Engine Marketing
Unit 3	Social Media and Consumer Engagement - Social Feedback Cycle, Social Web and Engagement, Operations and Marketing Connection.
Unit 4	Customer Engagement - Affiliate Marketing & Strategic Partnerships, email Marketing, Content Strategies, social media Personas
Unit 5	Social Media Marketing Plan - Social Media Marketing Planning Cycle, Observing Social Media Presence, Conducting a Competitive Analysis, Setting Goals, Determining Strategies, Monitoring
Unit 6	Social Listening - Importance of Social Analytics, Know Your Influencers, Customer Insights
Unit 7	Mobile Marketing - Mobile marketing strategies, Integrating Digital and Social Media Strategies
Unit 8	Social Media Monitoring - Tracking, Measuring, The Net Promoter Score, Return on Investment, Evaluation, Selecting social media monitoring tools
Unit 9	Mobile Computing and Location Marketing - Mobile computing, Marketing with mobile computing, location based social networks, and gaming, Marketing with location-based social networks
Unit 10	Engagement for Social Media 1 - Permission vs. Interruption Marketing, Initial Entry Strategy: Passive vs. Active, Principles of success
Unit 11	Engagement for Social Media 2 - Rules of Engagement, Social Media Marketing Ethics, Global Perspective
Unit 12	Marketing With Social Networks - Marketing with Social Networks, White label social networks, The future of Social Networks
Unit 13	Practical Exposure Using Social Media - Practical exposure using Facebook, Practical exposure using Instagram, Practical Exposure using Twitter

Unit 14	Publishing Blogs I – Introduction to blogs, everyone is a publisher, Marketing benefits of blogging
Unit 15	Publishing Blogs II - Linking a blog to marketing objectives, Creating a content strategy
Unit 16	Publishing Blogs III - Tips for successful blogging, Monitoring the blogosphere
Unit 17	Publishing Podcast and Webinars (Part 1) - Creating and sharing podcasts, Marketing with podcasting
Unit 18	Publishing Podcasts and Webinar (Part 2) - Hosting webinars, Marketing with Webinars and/or Podcasts
Unit 19	Sharing Videos, Images, Photos (Part 1) - Marketing with photo sharing, Marketing with online videos
Unit 20	Sharing Video, Image, Photos (Part 2) - Creating appealing video content, Sharing online videos, Encouraging user generated content

READINGS:

1. SOCIAL MEDIA MARKETING by DAVE EVANS AND JAKE MCKEE, WILEY.
2. SOCIAL MEDIA MARKETING: A STRATEGIC APPROACH by MELISSA S. BARKER, DONALD I. BARKER, NICHOLAS F. BORMANN, DEBRA ZAHAY, MARY LOU ROBERTS, CENGAGE LEARNING.
3. ADVANCED SOCIAL MEDIA MARKETING: HOW TO LEAD, LAUNCH, AND MANAGE A SUCCESSFUL SOCIAL MEDIA PROGRAM by TOM FUNK, APRESS.

Course code	DEMKT527	Course Title	CUSTOMER RELATIONSHIP MANAGEMENT
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

CO1: develop an insight and new learning in the area of customer relationship management.

CO2: identify and respond to customers' needs, expectations and issues to build productive and rewarding relationships with customers.

CO3: discuss the conceptual foundations of relationship marketing and its implications for further knowledge development in the field of business.

CO4: develop a conceptual understanding and the knowledge pertaining to practical application for building and managing partnering relationships with customers and suppliers.

CO5: analyse how CRM is being used in consumer and business markets - implementation, management, benefits, problems and solutions.

Unit No.	Content
Unit 1	Introduction to CRM: definition, CRM as a business strategy, elements of CRM
Unit 2	CRM systems-processes, and systems, entrance, applications and success of CRM.
Unit 3	Conceptual foundations-evolution and benefits of CRM; building customer relationship and zero customer defection
Unit 4	Strategy and organization of CRM- customer-supplier relationships, CRM as an integral business strategy and the relationship-oriented organization.
Unit 5	CRM marketing aspects: customer knowledge, communication and multichannel, the individualized customer proposition and the relationship policy.
Unit 6	Analytical CRM: relationship data management, data analyses and data mining, segmentation and selections, retention and cross-sell analyses
Unit 7	Operational CRM: call center management, use of internet, website and applications of direct mail.
Unit 8	CRM systems and their implementation: CRM systems, implementation of CRM systems, and the future aspects.
Unit 9	E CRM: application of e-CRM technologies-emails, websites, chat rooms, forums and other channels.
Unit 10	CRM process: introduction and objectives of a CRM process, an insight into CRM and E CRTA and online CRM.
Unit 11	Developing CRM strategy- role of CRM in business strategy and understanding service quality with regard to CRM
Unit 12	CRM links in e-business-E-Commerce and customer relationships on the internet.
Unit 13	Economics of customer relationship management-market share Vs customer share orientation, customer life time value and customer profitability.
Unit 14	CRM implementation- choosing the right CRM solution and framework for implementing CRM.
Unit 15	CRM application in B2C Market- importance of CRM in B2C market, benefits of B2C CRM and B2C application in banking and hospitality sectors.
Unit 16	CRM application in B2B Market- importance of CRM in B2B, B2B applications in e-commerce and FMCG sectors.
Unit 17	Managing the Personal Selling function- organising personal selling efforts, models for B2B sales force management
Unit 18	Choosing CRM tools- CRM technology software, features and requirements-driven technology selection.

Unit 19	Implementation of CRM systems-projects to implement CRM systems, successful implementation
Unit 20	Future of CRM- factors influencing future of CRM, opportunities and challenges in future CRM

READINGS:

1. CUSTOMER RELATIONSHIP MANAGEMENT by ED PEELLEN, PEARSON EDUCATION INDIA
2. THE CRM HANDBOOK- A BUSINESS GUIDE TO CUSTOMER RELATIONSHIP MANAGEMENT by JILL DYCHE, PEARSON EDUCATION INDIA.
3. CUSTOMER RELATIONSHIP MANAGEMENT-GETTING IT RIGHT by JUDITH W. KINCAID. PEARSON EDUCATION INDIA.

Course code	DEFIN568	Course Title	INTERNATIONAL FINANCIAL MANAGEMENT
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

CO1: understand the critical financial issues of international firms and international investors in present scenario.

CO2: analyze the framework of exchange rates and foreign exchange exposures and forces affecting exchange rates.

CO3: evaluate the international capital structure and international capital budgeting mechanism of multinational corporations.

CO4: analyze the different modes of raising finance in international market and significance of international finance in MNCs.

Unit No.	Content
Unit 1	Introduction to International Financial management: domestic vs. international finance, international financial market integration, currency crisis, and global recession and risk spill over.
Unit 2	Balance of Payments - structure - contents of current, capital, and reserve accounts –linkages and impact on exchange rates, capital markets, & economy - understanding bop structure of a country for investment and raising finance.
Unit 3	Foreign Exchange Markets and Exchange Rate Mathematics: nature, functions, transactions, participants, forex markets in India, forex dealing, foreign exchange regimes, foreign exchange rate determination, factors affecting foreign exchange.
Unit 4	Forecasting Foreign Exchange Rate: exchange rate forecasting– purchasing power parity, covered and uncovered interest rate parity – international fisher's effect - forward rate parity–influence of these parity relationships on exchange rates.
Unit 5	Foreign Exchange Spot and Derivative Market: spot and forward contracts-cash and spot forex trading, forward contracts- long and short forward contract, foreign exchange futures contract- contract specification trading at national stock exchange of India.
Unit 6	Management of Foreign Exchange Risk: foreign exchange exposure: risk, measurement and management: global firms foreign exchange exposure - transaction, economic and translation exposures, potential currency exposure impact on global firms and investor performance.
Unit 7	International Capital Markets - sources of international finance - debt and equity markets –international equity diversification, short-term vs long-term finance – export import finance.
Unit 8	Capital Structure of the Multinational Firm: international capital structure – parent vs subsidiary norms, global capital structure – factors affecting the choice of markets and structure. international cost of capital – calculation – cost of foreign debt, cost of foreign equity, use of international CAPM.
Unit 9	Capital Budgeting of the Multinational Firm: international capital budgeting – key issues – unique cash flows – adjusted present value approach. foreign direct investment – motives – determinants – international portfolio diversification.
Unit 10	Working Capital Management of the Multinational Firm: international working capital management – international cash management – decentralized vs.

	centralized cash management – bilateral vs multilateral netting – central cash pool.
Unit 11	Option Contracts American and European currency options, call and put option, option and risk management strategies. introduction to currency swap, foreign exchange risk management strategies through forward contracts, future contracts, money market hedges, and options contracts.
Unit 12	Managing Foreign Operations: ADRs; benefits and costs of ADR holdings for investors; benefits and costs of ADR issuance for corporations, external commercial borrowing and international refinancing, issues and challenges before multinational subsidiaries.
Unit 13	Multinational Cash management: centralized perspective of cash flow analysis, techniques to optimize cash flow- leading and lagging, netting, matching.
Unit 14	Country Risk Analysis: nature of country risk assessment, techniques to assess country risk, raters of country risk, multinational capital budgeting: problems and issues in foreign investment analysis, techniques of multinational capital budgeting - NPV, IRR, APV.
Unit 15	International Banking: reasons for international banking, types of international banking offices, challenges in international banking, global trends and developments in international banking.
Unit 16	International Money Market: meaning and features of international money market, instruments in money market, euro currency market, euro credits and forward rate agreements.
Unit 17	Market Efficiency and Behavioral Finance: market efficiency, random walk theory, weak-form market efficiency, semi-strong market efficiency, strong market efficiency, tests of various forms of efficiency.
Unit 18	Investment Risk and Project Analysis: advantages and disadvantages of different measures of investment risk. variance, semi-variance, value-at-risk and tail value-at-risk, calculating investment risk and analyzing project.
Unit 19	Option Greeks and Risk Management: risk management, analyzing option Greeks including Delta, Gamma, Theta and Vega.
Unit 20	Contemporary issues: lessons from recent crisis in derivatives market, crude oil relationship with foreign exchange, impact of federal policy decision on forex valuations, financial technology, new challenges in global financial management.

READINGS:

1. MULTINATIONAL FINANCIAL MANAGEMENT by SHAPIRO, A.C. (2013), (10THED.) JOHN, INC.
2. MULTINATIONAL FINANCE by BUCKLEY, A. (2009), (5THED.) PEARSON EDUCATION.
3. INTERNATIONAL FINANCE by LEVI, M.D. (2018), (6TH ED.), ROUTLEDGE PUBLICATIONS
4. INTERNATIONAL FINANCIAL MANAGEMENT by ADURA, J. (2018), (13THED.), CENGAGE LEARNING INDIA PVT LTD.

Course code	DEFIN566	Course Title	INTERNATIONAL BANKING AND FOREX MANAGEMENT
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

CO1: understand the dimensions of international banking.

CO2: establish legal and regulatory issues in international banking institutions.

CO3: demonstrate foreign exchange market operations.

CO4: analyze and understand the way in which the international financial system operates.

Unit No.	Content
Unit 1	International banking: Global trends and developments in international banking, international financial centers, offshore banking units, SEZs, profitability of international banking operations
Unit 2	Types of banking: Correspondent banking and inter -bank banking, investment banking, wholesale banking, retail banking, merchant banking
Unit 3	International institutions: International financial institutions, legal and regulatory aspects, risk management
Unit 4	International finance: Fundamental principles of lending to MNCs, documentation and monitoring
Unit 5	International agencies: International credit policy agencies and global capital markets, raising resources
Unit 6	Project finance: Project and infrastructure finance, financing of mergers and acquisitions
Unit 7	Foreign exchange evolution: Meaning, elements, Importance, evolution of exchange rate system, International Monetary system, Gold standard
Unit 8	Foreign exchange business: Foreign exchange management act (FEMA), foreign exchange management philosophy, different types of exchange rates
Unit 9	Regulations: RBI and FEDAI role in regulating foreign exchange, rules regarding rate structure, cover operations, dealing room activities and risk management principles, correspondent bank arrangements
Unit 10	Foreign banking products: NRI customers various banking and investment products available under FEMA, remittance facilities
Unit 11	International trade: Regulations covering international trade, various aspects of international trade, government policies
Unit 12	International regulating agencies: DGFT and their schemes, customs procedures, banks' role in implementing these policies and schemes, wto-its impact
Unit 13	Banking documents: Balance of payment, balance of trade, current account and capital account convertibility, documents used in trade, role of banks in foreign trade, letters of credit
Unit 14	Foreign exchange: Exchange control relating to foreign trade, import and export finance, laws governing trade finance, role of EXIM bank, risks involved in foreign trade finance
Unit 15	International capital markets: Meaning and definition, types of international capital markets, financial market flow beyond national boundaries

Unit 16	Capital market operations: Debt and non-debt flows, volatile and stable flows, interest rate differentials, demand and supply of funds in foreign market
Unit 17	Derivatives: Treasury operations of banks and corporates, derivatives as hedging instruments, RBI rules and guidelines regarding derivatives
Unit 18	Measuring derivatives: Mathematics of derivative valuation and pricing, risk assessment of derivatives
Unit 19	Market crisis: Lessons from recent crisis in derivatives market, crude oil relationship with foreign exchange, India economic crises of early nineties
Unit 20	Contemporary issues: Countries holding foreign exchange reserves, impact of federal policy decision on forex valuations, crypto currency and its challenges

READINGS:

1. INTERNATIONAL BANKING by P. SUBRAMANIAN, MACMILLAN
2. INTERNATIONAL BANKING OPERATIONS by B. Y. OLKAR, A. K. TRIVEDI, A. K. PATWARDHAN, A. R. PAWSE, MACMILLAN

Course code	DEFIN564	Course Title	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

CO1: assess the characteristics of different Investment alternatives and how to trade in the stock market.

CO2: apply different valuation models to find the intrinsic value of the shares.

CO3: use the fundamental and technical analysis to predict the stock price movement.

CO4: construct, revise and evaluate portfolios of different securities.

Unit No.	Content
Unit 1	Investment management: Investment, speculation, gambling, investment objectives, investment process, investment alternatives, investment alternatives evaluation, and common error in investment process
Unit 2	Financial markets: Meaning and functions of financial markets, money market, capital market, forex market, derivative market
Unit 3	Equity markets: Securities market structure, new issue market, methods of floating new issue, secondary market, major Indian stock exchanges, stock exchange players trading clearing and settlement procedure
Unit 4	Fixed income and other investment alternatives: Bond features, stocks versus bonds, type of bonds, pricing, yields, risks in fixed income securities, real estate, gold, commodities, other alternative investments
Unit 5	Depository system: Meaning, features, depositories in India, depository process and participants, advantages and disadvantages
Unit 6	Indices and listing: Meaning, need, types of indices calculation of indices, meaning, conditions, advantage and disadvantage of listing, procedure of listing
Unit 7	Risk and return: Concept of return, measurement of return, concept of risk, types of risk, measurement of risk
Unit 8	Equity valuation: Balance sheet valuation, dividend discount model, free cash flow model, earning multiplier approach
Unit 9	Capital market efficiency: Market efficiency, weak-form market efficiency, semi-strong market efficiency, strong market efficiency, tests of various forms of efficiency
Unit 10	Fundamental analysis: Industry analysis, economic analysis, company analysis, introduction to fundamental analysis, financial health
Unit 11	Technical analysis: Technical indicators, Dow Theory, fundamental v/s technical analysis, Elliot wave theory, chart patterns
Unit 12	Asset pricing: Capital asset pricing model, arbitrage pricing theory, relationship with the capital asset pricing model
Unit 13	Portfolio construction and management: Efficient frontier, portfolio risk, portfolio return, diversification
Unit 14	Portfolio evaluation and revision: Need for portfolio revision, evaluation, passive vs. active portfolio management

Unit 15	Investment avenues for foreign portfolio investors: Foreign portfolio investment, FPIs vs FDIs, categories & eligibility criteria for FPIs, benefits & risks of foreign portfolio investment
Unit 16	Introduction to mutual funds: Mutual fund and its concept, regulations & structure of mutual funds, legal and regulatory framework for mutual funds
Unit 17	Derivative and regulatory aspect: Types of financial derivative, meaning & types of options, regulation of derivative market
Unit 18	Management of market risk: Risk management & option Greeks, Vega, hedging, stop-loss order, scenario analysis, risk quantification
Unit 19	Regulatory framework in investments: purpose & aim, organization & management, functions of SEBI, role of the association of mutual funds, AMFI registration number or ARN, PFRDA, national pension scheme, Atal pension yojana, Reserve Bank of India
Unit 20	Contemporary issues: Fintech, algorithmic trading, robo-advisors, high frequency trade

READINGS:

1. SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT by K SASIDHARAN & ALEX K MATHEWS, MCGRAW HILL EDUCATION
2. SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT by PUNITHAVATHY PANDIAN, VIKAS PUBLISHING HOUSE

Course code	DEHRM511	Course Title	TRAINING AND DEVELOPMENT
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

C01: describe the key concepts associated with learning and development.

C02: enumerate the training process and the various methods of training for various categories of employees.

C03: identify training needs of various categories of employees in a variety of organizational contexts

C04: examine the impact of training on various organizational and HR aspects.

C05: develop the training process of various categories of employees in a variety of organizational contexts.

C06: transfer the training program from variety of organizational contexts.

Unit No.	Content
Unit 1	Introduction to Employee Training and Development: Concept of Training and Development, Designing Effective Training, Snapshot of Training, organizational characteristics that influence training
Unit 2	Strategic Training & Development: The Strategic Training and Development Process, Training Need in different Strategies, Marketing of Training function, Outsourcing of training Function
Unit 3	Training need Assessment: Need and Methods of Need Assessment, Need Assessment Process, Scope of Need Assessment
Unit 4	Training Design: Understanding & Developing the Objectives of Training, competency models, transfer of training, Considerations in Designing Effective Training Programs
Unit 5	Program Design: Introduction of program design, program design implications for transfer of training, using knowledge management for learning
Unit 6	Learning: Key components of learning, forces influencing learning, Learning Process, Learning Theories, Instructional Emphasis of Learning outcomes
Unit 7	Training Modules: Developing training modules including training objectives, lesson plan and learning climate
Unit 8	Training & Development Methods: Traditional training methods: On the job and Off the job training methods: Lecture method, Simulation, Case-study, special projects, Games, Action Maze, Role Play, Team Building, and Sensitivity Training; Contemporary Methods of Training including Technology based learning, Experiential learning, Computer Based Training, Training for change, Learning Organization, Future trends of training and development
Unit 9	E-learning and Use of technology: Technology's Influence on Training and Learning, Experiential Learning, Computer Based Training, Training for change, Learning Organization, e-training and virtual tools, Role of AI in employee training
Unit 10	Training Evaluation: Overview of Evaluation Process, Reasons for evaluating training, Methods of evaluating effectiveness of Training Efforts; Kirkpatrick model of training effectiveness, designs and statistical tools used for training evaluation, outcomes used and their appropriateness in training evaluation, measuring human capital and training activity
Unit 11	Problems in Evaluation: Problems of Measurement and Evaluation; Costing

	of training, measuring costs and benefits of training program, determining return on investment, obtaining feedback of trainees; Training issues resulting from the external environment and internal needs of the company
Unit 12	Employee Development: Introduction, Approaches to Employee Development, The Development Planning Process, Company Strategies for providing Development, Types of MDPs, EDPs/Seminars and Conferences
Unit 13	Career Management: Need for and Importance of Career Management, Protean versus Traditional Career, Role of Employees, Managers, Human resource managers, and the company in the career Management, Evaluating Career management System
Unit 14	Career Development: A Model of Career Development, Career paths and developing dual career options, Career portfolio, Balancing work and life
Unit 15	Training and Development Methodologies: Overview of Training Methodologies- Logic and Process of Learning; Principles of Learning; Individual differences in learning, learning curve, learning management system
Unit 16	Criteria for Training Method Selection: Skills of an Effective Trainer; Use of Audio-Visual Aids in training; Computer Aided Instructions- Distance Learning, Open Learning, E- Learning; Technologies Convergence and Multimedia Environment.
Unit 17	Employee coaching and performance management: Coaching to improve poor performance, coaching analysis. Employee counseling for development: Overview of counseling programmes, employee assistance programme, stress management, employee wellness and health promotion.
Unit 18	Training and intellectual capital: Intellectual capital (IC), its measurement and management: Components of IC, measurement models of IC, IC index and challenges for HR. Training Trends Worldwide: Different training techniques at global level; Role of environment influence in training cross cultural workforce, Moving from Training to Performance: Transition phase involved in training and challenges.
Unit 19	Emerging Trends in Training and Development: Gamification, team training and six sigma training; Electronic Enabled Training Systems (EETS)- Concept and types, benefits and challenges in using EETS; concerns in implementation of EETS – availability, incorporation, extension, and learning renewals for EETS; use of EETS and its up scalability; follow up activities; Training and development initiatives of some selected companies from private and public sectors and MNCs.
Unit 20	Social responsibility and future of training and development: legal issues and managing a diverse workforce at home and abroad, cross-cultural preparation, career challenges facing a multigenerational workforce, career paths, dual career paths and career recycling, meeting the needs of older workers, training for sustainability, implications of future trends for trainers' skills and competencies

READINGS:

1. HANDBOOK OF TRAINING AND DEVELOPMENT by PRIOR, JOHN, JAICO PUBLISHING HOUSE, BOMBAY.
2. MANPOWER TRAINING AND DEVELOPMENT by KENNEY, JOHN; DONNELLY, EUGENE L. AND MARGARET A. REID, LONDON INSTITUTE OF PERSONNEL MANAGEMENT.
3. EMPLOYEE TRAINING AND DEVELOPMENT by NOE, RAYMOND A., AND AMITABH DEO KODWANI, TATA MCGRAW HILL.

Course code	DEHRM516	Course Title	INDUSTRIAL RELATION AND LABOUR LAWS
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

CO1: associate intricacies of employee-employer relations in actual work situation.

CO2: appraise industrial relation dynamics and apply labour related laws in actual operation with resulting implications.

CO3: establish relation between industrial culture and government policies.

CO4: manage sound inter personal relations with individual employees at the back drop of trade union and non-trade union bargaining.

CO5: evaluate the recent legal amendments implications on employee-employer relations.

CO6: apply several techniques of negotiation and bargaining with various stakeholders in an organization.

Unit No.	Content
Unit 1	Introduction to Industrial Relations: Evolution of Industrial Relations, models of Industrial Relations, approaches to Industrial Relations
Unit 2	Industrial Relations in India: Development of industrial Relations in India, The role of Employee, Employer and Government in Industrial Relations
Unit 3	Trade Unions: Theoretical Foundation and Legal Framework, structure and management of trade union, trade union as an Organization Structure
Unit 4	The Trade Union Movement: Development of Trade union movement in India, trade union cooperation and consultative machinery, measures to strengthen the trade union movement in India
Unit 5	Trade Union Rivalry and Recognition: Code of conduct and trade union rivalry, recognition of trade unions in India, recognition of majority union and problems involved, rights of recognized versus minority unions
Unit 6	Size and Finance of Indian Trade Unions: Factors responsible for the small size, Consequences of the small size of trade unions, Sources and challenges of finance, Ways of improving finance
Unit 7	Collective Bargaining: Importance of collective bargaining, types, process and challenges, legal framework
Unit 8	Grievances: Nature and causes of Grievances, grievances procedures, managing employee grievance, Grievance Settlement Authority
Unit 9	Discipline: Importance and types of discipline, managing discipline, types of indiscipline, domestic enquiry
Unit 10	Worker participation in Management: Importance, types, workers participation in India, role of government.
Unit 11	Industrial Disputes: Causes and effects, prevention of industrial disputes, settlement of industrial disputes, industrial disputes in India
Unit 12	The Industrial Disputes Act, 1947: Settlement of Industrial Disputes, Authorities under the Act, Powers and Duties of Authorities, Provisions relating to Strike, Retrenchment and Closure, Unfair Labor Practices
Unit 13	Industrial Employment (Standing Orders) Act, 1946: Standing orders, Certification, Authorities under the act, The Industrial Relations Code, 2020 No. 35 of 2020
Unit 14	Wage Legislation: Equal Remuneration Act, 1976, Wage board, The Code on

	Wages, 2019 No. 29 of 2019
Unit 15	Factories Act,1948: registration of factories, Factory Inspector, health, welfare, safety provisions, hazardous process
Unit 16	Trade Unions Act,1926: registration of trade unions, rights and responsibilities, merger, amalgamation and cancellation of registration
Unit 17	Mines Act,1952: health, welfare and safety provisions, role of safety officer, welfare officer, inspector
Unit 18	ILO: Structure and functions, recommendation, conventions, India and ILO
Unit 19	International industrial relations: Key issues in international industrial relations, responses of Trade unions to multinational, regional integration, social dumping, responses of trade unions to Multinationals
Unit 20	Emerging Trends in Industrial Relations: Labour Laws, Implications for MNC, Migration of Workforce and industrial Relations, The Code on Social Security,2020 No. 36 OF 2020, The Occupational Safety, Health and Working Conditions Code, 2020 No. 37 of 2020

READINGS:

1. DYNAMICS OF INDUSTRIAL RELATIONS by MAMORIA, S., MAMORIA, C.B. & GANKAR. (2010), NEW DELHI: HIMALAYA PUBLISHING
2. INDUSTRIAL RELATIONS by VENKATA RATNAM, C.S. & DHAL, M. (2017), OXFORD UNIVERSITY PRESS, INDIA
3. INDUSTRIAL RELATIONS by MONAPPA, A. (2000), NEW DELHI: TATA MCGRAW

Course code	DEHRM508	Course Title	HUMAN RESOURCE METRICS AND ANALYTICS
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course outcomes: Through this course, the student will be able to

C01: analyze the value HR analytics brings to human resources.

C02: understand the different analytical approaches used by HR Professionals to solve real business problems.

C03: evaluate workforce data to identify trends and other actionable performance information.

C04: visualize data and use of the Analytics Process Model to analyze HR data.

C05: develop best practices for using HR analytics to support data-driven decisions.

Unit No.	Content
Unit 1	Introduction to HR Analytics: concepts and definition of human resource analytics, develop best practices for using HR analytics to support data-driven decisions
Unit 2	Aligning HR with Business: cause and effect relationships between HR functions and business goals, talent management functions, interpreting employees' performance data and assessing their satisfaction
Unit 3	Steps for alignment of HRA with Business: framing of queries, understanding data and metrics, building platform for HR analytics, enhancement of HR analytics capabilities
Unit 4	Framework and Models in HR Analytics: the LAMP framework, predictive models, HCM software
Unit 5	HR Research Tools and Techniques: co relational research, casual-comparative research, experimental research, parametric and non parametric tests
Unit 6	HR Metrics: recruitment metrics, metrics for training and development, HR scorecard
Unit 7	HR Reports: employee information, recruitment reports, on boarding reports, compensation and administration reports
Unit 8	HR Dashboards and Scorecards: dashboards for HR, HR analytics a better tool for decision making
Unit 9	HR Data: data quality, data collection, big data for human resources, transforming HR data into information, process for data collection
Unit 10	HR Reporting: types and forms of HR reports
Unit 11	HR Data Visualization: data visualization, performing root cause analysis
Unit 12	Datafication of human resources: computerization of data, transforming data into information, business value
Unit 13	Phases of HR Predictive Modeling: operational phase, advanced reporting, advanced analytics, predictive analytics
Unit 14	Data for HR Predictive Analysis: HR database, employee survey data, customer survey data
Unit 15	Predictive Analysis Tools and Techniques: linear regression, discrete choice model, logistic regression, neural networks, decision tree and scenario analysis
Unit 16	Software Solutions: SPSS, Minitab, strata, SAS, R, JASP
Unit 17	HR Analytics Applications: application in human resource planning, work from home and HRA, AI in HRM, data security in HR analytics

Unit 18	HR Analytics in Talent Acquisition: Application of HR analytics to improve talent acquisition, talent retention and mobility through HR analytics, enhancing employee engagement through HR analytics
Unit 19	HR Cost Benefits Metrics Valuation: select the right programs/initiatives in business enable a mind-set to use HR analytics in business programs/initiatives
Unit 20	Return on investment in HR Analytics: drive improvement and change

READINGS:

1. HR ANALYTICS UNDERSTANDING THEORIES AND APPLICATION by DIPAK KUMAR BHATTACHARYYA, SAGE PUBLICATIONS
2. WINNING ON HR ANALYTICS LEVERAGING DATA FOR COMPETITIVE ADVANTAGE by RAMESH SOUNDARARAJAN AND KULDEEP SINGH, SAGE PUBLICATIONS

Course Code	DECAP780	Course Title	PROBABILITY AND STATISTICS
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WEIGHTAGE		
CA	ETE(Th.)	ETE (Pr.)
30	40	30

Course Outcomes: Through this course, the student will be able to

C01: experiment to carry out simple data investigations for categorical variables.

C02: measure a random variable that describe randomness or an uncertainty in certain realistic situation. It can be of either discrete or continuous type.

C03: employ the different types of data and choose an appropriate way to display them.

C04: identify and compare techniques for collecting data from primary and secondary sources, and identify questions and issues involving different data types.

Unit No.	Content
Unit-1	Introduction to probability: Elements of Set Theory, Sample Space and Probability Measure, Statistical Independence, Conditional Probability, Counting Sample Points, Mutually and pair wise independent events, multiplication theorem of probability for independent events, Baye's theorem.
Unit-2	Introduction to statistics and data analysis: Statistical Inference, Samples, Populations and Experimental Design
Unit-3	Measures of Location: The Sample Mean and Median, Measures of Variability, Discrete and Continuous Data, Statistical Modeling, Scientific Inspection, and Graphical Diagnostics, Graphical Methods and Data Description, General Types of Statistical Studies.
Unit-4	Mathematical expectations: Definition, expected value of random variable, expected value of function of a random variable, properties of expectations, Various measures of Central Tendency, Dispersion, skewness and Kurtosis for continuous probability distribution, continuous distribution function, Variance, Properties of variance, covariance.
Unit-5	Moments: Chebyshev Inequality, Moments of Two or More Random Variables, Moments of Sums of Random Variables, Moment Generating Function, Properties of moment generating function, cumulants, Raw and central moments.
Unit-6	Relation between moments: raw moments & central moments, Effect of change of origin and scale on moments, Pearsonian coefficients Measures of skewness, kurtosis.
Unit-7	Correlation, regression and Pearson's Correlation coefficient, Spearman's Rank correlation coefficient
Unit-8	Regression: Regression Concepts, Regression lines, Multiple correlation and regression,
Unit-9	Analysis of variance: Analysis of Variance- One-way classification and two-way classification.
Unit-10	Standard distribution: Binomial, Poisson, Negative Binomial Distribution, Normal Distribution and their properties.
Unit-11	Statistical quality control: Introduction, Process control, control charts for variables – X and R, X and S charts control,
Unit-12	Charts for attributes: p chart, np chart, c chart and their applications in process control
Unit-13	Index numbers: Learn about the need of index numbers, explain the different methods of constructing index numbers, and evaluate the tests for judging the soundness of an index number.
Unit-14	Time series: Explain about time series, describe components of time series, and define measurement of variations of time series.
Unit-15	Sampling theory: Sampling Theory, Random Samples and random Numbers, Sampling with and without replacement, sampling distributions, sampling distribution of means, sampling distribution of properties, sampling distribution of differences and sum,

	standard errors, software demonstration of elementary sampling Theory.
Unit-16	Hypothesis testing: Definition of hypothesis, interpret statistical procedure of hypothesis testing, use application of hypothesis testing in several business contexts.
Unit-17	Tests of significance: Based On t, F and Z Distributions: -Student's (t) distribution, definition, properties, critical value of t, Application of t-distribution, Test for single mean, t-test for difference of mean,
Unit-18	Fischer Z- transformation, F-statistic, critical value of F distribution, application.
Unit-19	Statistical tools and techniques: Bayesian Concepts, Bayesian Inferences, Bayes Estimates Using Decision Theory Framework,
Unit-20	Statistical Tools: Excel, R-Studio and SPSS.

READINGS:

1. FUNDAMENTALS OF MATHEMATICAL STATISTICS by S.C. GUPTA AND V. K. KAPOOR, SULTAN CHAND & SONS (P) LTD.
2. PROBABILITY & STATISTICS FOR ENGINEERS & SCIENTISTS by RONALD E. WALPOLE, PEARSON

Course code	DECAP781	Course Title	Data Science Toolbox
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WEIGHTAGE		
CA	ETE(Th.)	ETE
30	40	30

Course Outcome: Through this course, the student will be able to

C01: understand the concept and need for data science.

C02: discuss the various phases in the data analytics lifecycle.

C03: analyze the fundamental areas of study in data science

C04: understand the concept of data preprocessing.

C05: understand the importance of data visualization.

C06: learn the various data visualization software and libraries.

C07: understand different types of machine learning techniques

C08: use Python for developing machine learning algorithms

C09: use various data science tools for developing algorithms

C010: understand the fundamentals of big data.

Unit No.	Content
Unit 1	Introduction to Data Science: Why learn data science?, Life cycle of data analytics: Data discovery, Data preparation, Model planning, Model building, Communicate results, Operationalization. Types of data analysis: Descriptive analysis, Diagnostic analysis, Predictive analysis, Prescriptive analysis, types of data analytics.
Unit 2	Data pre-processing: Introduction to data preprocessing, Data preprocessing, Data wrangling, Data types and forms, Possible data error types.
Unit 3	Various data preprocessing operations: Data cleaning, Data integration, Data transformation, Data reduction, Data discretization.
Unit 4	Data Plotting and Visualization: Introduction to data visualization, Visual encoding, Data visualization software, Data visualization libraries, Basic data visualization tools, Advanced data visualization tools, Data visualization types.
Unit 5	Role of statistics in data science: Hypothesis testing, null hypothesis, alternative hypothesis Statistical significance: Type 1 and type 2 errors, Data science, p-value, ANOVA, Chi-square test.
Unit 6	Machine learning: Introduction, types of machine learning techniques, learning problems and system, designing a learning system, concept of learning task.
Unit 7	Unsupervised learning: Introduction to Clustering algorithms, K Means, K mode, K median, Performance measures of clustering.
Unit 8	Supervised learning: Introduction to Classification algorithms, KNN (k-nearest neighbors) algorithm, Naïve Bayes algorithm, cross-validation and metrics.
Unit 9	Regression models: Introduction to regression, types of regression, Machine linear regression, machine logistic regression, regularization, performance metrics.
Unit 10	Weka: Introduction to weka tool, Data import, Choose model (algorithm), Hands on analysis of clustering and classification algorithms.
Unit 11	Excel data analysis: Introduction to excel data analysis, Data analysis tool pack, Descriptive statistics, Analysis of variance (ANOVA), Regression, Histogram.

Unit 12	R tool: Introduction R, RStudio, Some important R data structures: Vectors, character strings, Matrices, Lists, Dataframe, R programming structure.
Unit 13	Data science packages in R: Data import, ggplot2 for visualization, dplyr and dbplyr for Data Wrangling, mlr3 and caret, tidyverse.
Unit 14	NumPy and Pandas: Introduction to python, NumPy, understanding data types in python, Pandas for data analysis, data indexing and selection: Data selection in series, Data selection in DataFrame, Missing data in Pandas, Handling missing data
Unit 15	Machine learning packages in python: Data import, Visualization with Matplotlib, simple line and scatter plots, Seaborn, heatmap, Introducing Sci-kit learn package.
Unit 16	RapidMiner: Introduction, data importation and exporting tool, How to implement algorithms?, Hands on analysis of algorithms.
Unit 17	Tableau: Introduction, Data preparation, Adding data sources in Tableau, Creating data visualizations.
Unit 18	KNIME: Introduction, Overview of KNIME analytics platform, Node and workflow, Data preparation, Importing and exporting data, Hands on analysis of model.
Unit 19	Big data: Introduction to big data, Role of big data in data science, varies V's in big data, Characteristics of Big Data and Dimensions of Scalability, Foundations for Big Data Systems and Programming, Applications of Big data.
Unit 20	PowerBI and DataRobot: Introduction, Data modeling, Import and export data, Hands on analysis of PowerBI and DataRobot.

READINGS:

1. NORMAN MATLOFF, "THE ART OF R PROGRAMMING", NO STARCH PRESS, 2011.
2. JASON BELL, "MACHINE LEARNING: HANDS-ON FOR DEVELOPERS AND TECHNICAL PROFESSIONALS", WILEY PUBLICATION, 2015
3. JAKE VANDER PLAS, "PYTHON DATA SCIENCE HANDBOOK", O'REILLY, 2017.
4. ALEXANDER LOTH, NATE VOGEL AND SOPHIE SPARKES, "VISUAL ANALYTICS WITH TABLEAU", WILEY, 2019.
5. GYPSY NANDI AND RUPAM KUMAR SHARMA, "DATA SCIENCE FUNDAMENTALS AND PRACTICAL APPROACH", BPB PUBLISHER, 2020.

Course code	DECAP782	Course Title	ADVANCE DATA VISUALISATION
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WEIGHTAGE		
CA	ETE(Th.)	ETE (Pr.)
30	40	30

Course Outcomes: Through this course, the student will be able to

CO1: discuss the terminology used in Tableau Prep.

CO2: identify how Tableau Prep approaches data sampling.

CO3: construct and understand data prep flows that address common scenarios encountered in data preparation, as applied to common data use cases.

CO4: review the quality of the data and perform exploratory analysis.

Unit No.	Content
Unit 1	Introduction to Data Visualization: Acquiring and Visualizing Data, Simultaneous acquisition and visualization, Applications of Data Visualization, Keys factors of Data Visualization. Reading Data from Standard text files (.txt, .csv, XML), Displaying JSON content. Data visualization tools.
Unit 2	Introduction to TABLEAU: Installation of TABLEAU, Tableau Interface Data Types, Tableau features
Unit 3	Tableau Data Sources: Connecting data with tableau, joining data sources, combine data sources using data blending, Creating and Using Sets, Creating & using Parameters
Unit 4	Basic Visualizations: Creating Basic Visualizations, Creating Groups, Bar chart, Geographic map, Crosstab report, Scatter plot, Line chart
Unit 5	Creation of Hierarchies: Create hierarchies to drill down into data, creating groups for data, Creating and Using Sets Create data filters, create calculated fields, combine data sources using data blending, Creating & using Parameters, Bringing in More data with Joins
Unit 6	Advance Data Visualization/Graph: Bar Chart, Stacked Bar Chart, Bar in Bar Chart. Combo Chart, Line Chart, Single Axis, Dual Axis, Blended Axis, Dual Axis Chart, Line, Bar Lollipop Chart, Donut, Bullet Graph, Histogram Chart, Animated Graph
Unit 7	Building View Advance Map Option: Explain latitude and longitude, Default location/Edit locations, Symbol map & Filled Map, Map Layer, Image in map, Map option.
Unit 8	Tableau Calculations & Filters: Calculated Fields, Basic Approach to Calculate Rank, Advanced Approach to Calculate Rank, Calculating Running Total, Filters Introduction, Quick Filters, Filters on Dimensions, Conditional Filters, Top and Bottom Filters, Filters on Measures, Context Filters, Slicing Filters, Data Source Filters, Extract Filters
Unit 9	Managing, organizing and enhancing data in tableau: Splitting data, Pivoting & Transforming data, Blue & green pills Filters, Blue & green pills effect on dates, cleaning data by Bulk Re-aliasing, setting data defaults, create hierarchies to drill down into data, Creating groups for data, Create calculated fields

Unit 10	Making Comparisons and Basic Calculation: Sorting, Calculation – String, Basic, Date and Logic, Continuous and Discrete data, Working with Dates, Creating calculated Fields i. Logical Function ii. Case if Function iii. ZN Function iv. Else if Function v. Ad-hoc Function, Manipulating Text – left and right function
Unit 11	Advance Calculation: Table Calculation, Running total, Percent, Percent total, Year over Year Growth, LOD i. Include ii. Exclude iii. Fixed
Unit 12	Analytical Topic/Capability: Trend Line, Forecasting, Cluster, Reference Line, Box Plot (Understanding Outliers in Data), Distribution Band , Reference Band
Unit 13	Interactive Dashboards Tableau: Creating a dashboard, designing dashboard, add motions, adding interactivity with actions, Dashboard layout and formatting, add extra detail to visualization using Marks Shelf, Add Size, Shape, Labels
Unit 14	Sharing Your Dashboard: Publishing to PDF, Exporting to Pivot Table and Images, Exporting Packaged workbooks, Tableau Reader, Tableau Online, Tableau Server, Tableau Public, Version Control, Publishing to Tableau Server
Unit 15	Designing with Tableau: Story Points and how to create them, designing effective slide presentations to showcase data story, publish online business dashboards with Tableau, Exporting Pdfs, Sharing Dashboard Securely
Unit 16	Mathematical and visual analytics in tableau: Aggregate calculations, Date calculations, Logic calculations, Number calculations, String calculations, Type calculations, LOD Expressions, Add reference lines and trend lines
Unit 17	Advanced Data Modeling: Data Modeling, The Broader Tableau Ecosystem, Data Preparation: Where and When
Unit 18	Making charts interactive and animated: Data joins, updates and exits, interactive buttons, updating charts, adding transactions, using keys, wrapping the update phase in a function, adding a Play button to the page, Making the Play button go, Allow the user to interrupt the play, sequence. Visualization of groups, trees, graphs, clusters, networks, software, Metaphorical visualization
Unit 19	Visualization of Data with advanced technology: Visualization data with advanced analytics Polygon Maps, Bump Charts, Control charts, Funnel charts, Pareto charts, Waterfall charts, Usage and filtration of data with charts, visualizing categorical data, visualizing time series data, visualizing multiple variables, Visualizing geospatial data, Map box integrations, Web Mapping Services, Background Images
Unit 20	Projects: Financial Analysis Dashboard, HR Analysis Dashboard, Market Analysis Dashboard, Tourism Analysis Dashboard, New Business Analysis Dashboard, Banking Sector Analysis, Issue & Bug reporting Analysis, Population Trend Analysis

READINGS:

1. DESIGNING DATA VISUALIZATIONS: REPRESENTING INFORMATIONAL RELATIONSHIPS by JULIE STEELE, NOAH ILIINSKY, KINDLE EDITION
2. MASTERING PYTHON DATA VISUALIZATION PAPERBACK by KIRTHI RAMAN, PACKT PUBLISHING

Course Code	DEOPR509	Course Title	TOTAL QUALITY MANAGEMENT	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcome: Through this course, the student will be able to

CO1: assess the implementation of TQM in an organization.

CO2: evaluate tools and techniques related to quality control, acceptance sampling, inspections etc.

CO3: interpret relevant quality standards.

CO4: understand the concept of data preprocessing.

Unit No.	Content
Unit 1	Concept of total quality and its evolution: Introduction, basic terminology related to quality, dimensions of quality, introduction to quality gurus
Unit 2	Quality characteristics: Variable and attributes, control charts for variables: mean-range charts. Control chart for attributes: P-chart for defectives, control charts for variables: c-charts for defects
Unit 3	The Philosophy of Total Quality Management: Introduction, Definitions of TQM, The Total Quality System, The Evolution of TQM - From Inspection to Total Quality Management, Seven Phases in the Development of TQM, Principles of Total Quality Management, The Key Elements of TQM
Unit 4	TQM in Services: Introduction, Service Industry and Quality, Value in the Service Industry, Defining Service Quality, SERVQUAL Model, Hospitality Sector, Improving the Service Quality
Unit 5	Acceptance sampling and inspection plans: Introduction, situations warranting sampling inspection, desirable characteristics of sample, methods of sampling, factors affecting the selection of sample, operating characteristics curve
Unit 6	SQC and SPC: Introduction, objectives and uses of SQC charts, statistical quality control, statistical process control
Unit 7	Quality costs: Introduction, cost of quality, classification of quality-related costs, quality-cost analysis, COQ approach, quality-cost trade-of
Unit 8	Seven basic quality control tools: Check sheet (tally chart), flowchart, histograms / bar graphs, pareto analysis, control charts, scatter diagram, cause-and-effect diagram
Unit 9	Quality improvement: Introduction, process, juran trilogy, improvement strategies, types of problems, problem-solving method, kaizen
Unit 10	Quality function deployment (QFD): Introduction, QFD team, benefits of QFD, the voice of the customer, organization of information, house of quality
Unit 11	Taguchi loss function: Introduction, loss function, orthogonal arrays, quality loss function, design of experiments, noise
Unit 12	Marketing aspect of total quality management: Customer in quality definition, who is the customer, customer satisfaction measures, customer perception of quality, quality of service
Unit 13	Quality audits: Types of audits, audit procedure
Unit 14	Six sigma: Introduction, benefits, costs in six sigma, DMAIC cycle
Unit 15	Total quality and environment and safety: Introduction to ISO 9000, introduction to ISO 14000, environment management system, industry specific standards and quality awards

Unit 16	Benchmarking: Introduction, Reasons to Benchmark, Process, Deciding What to Benchmark, Understanding Current Performance, Pitfalls and Criticisms of Benchmarking
Unit 17	Benchmarking: Introduction, Reliability, Reliability Requirements, Failure Rate, Intent of FMEA, FMEA Team, FMEA Documentation.
Unit 18	Total Productive Maintenance: Introduction, The Plan, Learning the New Philosophy, Training, Improvement Needs, Autonomous Work Groups
Unit 19	Kaizen: Introduction, Concepts of Kaizen, Lean, What is the 5 S? Kaizen vs. Innovation, Kaizen - The Practice, Poka-yoke.
Unit 20	Business Process Re-engineering: Introduction, When Is BPR Used? Key Concepts of BPR, The 3 R's of Re-engineering, Emergence of BPR, Requirements of the Re-engineering, Process, Rules of BPR

READINGS:

1. TOTAL QUALITY MANAGEMENT by N.V.S. RAJU, CENGAGE LEARNING
2. TOTAL QUALITY MANAGEMENT by BESTERFIELD DALE. H., PEARSON

Course Code	DEOPR505	Course Title	LOGISTICS AND SUPPLY CHAIN MANAGEMENT	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcome: Through this course, the student will be able to

C01: develop a high level of technical competence and skill in the logistics management.

C02: estimate knowledge of the functional components within logistics to the inter-relationships in the integrated supply chain.

C03: analyze the various requirements for effectively managing the inventory and reverse logistics of companies.

C04: explain the impact of supply chain decisions on the success of a firm.

Unit No.	Content
Unit 1	Supply Chain Management-An Overview: introduction, the objective of a supply chain, the importance of supply chain decisions, major supply chain issues.
Unit 2	Strategic challenges and change for supply chains: principles of supply chain management, game-changing supply chain technologies, supply chain innovation and transformation
Unit 3	Introduction to logistics: the logistical value proposition, the work of logistics, logistical operations, logistical integration objectives
Unit 4	Role of Logistics in Supply Chains: role of logistics in supply chains, logistics activities
Unit 5	Demand Management: introduction, balancing supply and demand, traditional forecasting, forecasting techniques
Unit 6	Procurement: procurement importance, procurement objectives, procurement strategy, logistical interfaces with procurement
Unit 7	Transportation: transport functionality and participants, transportation modal structure, specialized transportation services
Unit 8	Warehousing: strategic warehousing, warehouse ownership arrangements, warehouse decisions, warehouse operations
Unit 9	Packaging: packaging perspectives, packaging for handling efficiency
Unit 10	Material handling: role of material handling in logistics, principles of material handling, materials-handling equipment, material handling safety perspective
Unit 11	Reverse logistics: meaning of reverse logistics, scope of reverse logistics, system design considerations, reverse logistics as competitive tool
Unit 12	Order Management and Customer Service: introduction, influencing the order, executing the order, e-commerce order fulfillment strategies
Unit 13	Technology in logistics fulfillment: role of technology, automatic identification technology, communication technology, automated material handling
Unit 14	Managing Inventory in the Supply Chain: rationale for inventory, inventory costs, the role of safety inventory in a supply chain,
Unit 15	Determining the optimal level of product availability: the importance of the level of product availability, factors affecting optimal level of product availability, optimising availability of maintenance, repair, and operations inventories
Unit 16	Sourcing decisions in a supply chain: the role of sourcing in a supply chain, in-house or outsource, examples of successful third-party suppliers, the impact of incentives when outsourcing.
Unit 17	Logistics outsourcing: catalysts for outsourcing trends, benefits of logistics outsourcing, third party logistics, fourth party logistics
Unit 18	Sustainability and the supply chain: the role of sustainability in a supply chain, key pillars of sustainability, closed-loop supply chains, the pricing of sustainability.

Unit 19	Network Design: the role of network design in the supply chain, factors influencing network design decisions, framework for network design decisions
Unit 20	Supply chain performance measurement: dimensions of supply chain performance metrics, financial impact of supply chain decisions, , a supply chain operations reference (SCOR) model

READINGS:

1. SUPPLY CHAIN MANAGEMENT –STRATEGY, PLANNING AND OPERATION. by CHOPRA, S., &MEINDEL, P, PHI LEARNING
2. LOGISTICS MANAGEMENT by VINOD V. SOPLE, PEARSON

Course Code	DEOPR508	Course Title	PROJECT MANAGEMENT	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcome: Through this course, the student will be able to

CO1: apply the project management concepts while selecting projects.

CO2: choose effective project execution and control techniques.

CO3: evaluate project planning activities that accurately forecast project costs, timelines and quality.

CO4: apply knowledge of ethics and professional responsibility.

Unit No.	Content
Unit 1	Introduction to project management: Concept of a project and project management, features of projects, project family tree, categories of projects, Project manager's roles and responsibilities
Unit 2	Taxonomy of Project Management: Project life cycle phases, Project selection process, Project appraisal, tools and techniques of project management, the 7-S of project management
Unit 3	Human resources and contracting: Delegation of authority, accountability in project execution, popular matrices used for delegation of work related to projects
Unit 4	Legal aspects of Projects: 3R's of contracting, contracts, team building, tendering, and selection of contractors
Unit 5	Generation and screening of project ideas: Generation of ideas, monitoring of the environment, Corporate Appraisal, tools for identifying investment opportunities, scouting for project ideas, preliminary screening, and project rating index.
Unit 6	Market and demand analysis: Situational analysis, collection of secondary information, the conduct of the market survey, characterization of the market.
Unit 7	Demand Forecasting in Projects: Concept, importance, qualitative and quantitative techniques, demand forecasting and market planning, Uncertainties in demand forecasting.
Unit 8	Technical analysis: Manufacturing process Technology, technical arrangements, material inputs, and utilities, Product Mix, Plant Capacity, Location and site selection, machinery and equipment environmental aspects, structures, and civil works
Unit 9	Financial analysis: Financial estimates and projections: cost of the project, means of finance, estimation of sales and production, working capital requirements and its financing, projected cash flow statement and projected balance sheet
Unit 10	Capital expenditure decisions: Introduction, Meaning and features of capital budgeting decisions Importance of capital budgeting decisions, Kinds of capital expenditure decisions, Capital expenditure budgeting process, Criteria of capital budgeting, Resource allocation framework, Capital budgeting difficulties
Unit 11	Project Financing in India: Introduction, Meaning and importance of project finance, Means of finance and sources of project finance in India, Financial institution structure and financial assistance, Norms of finance and term loan procedure, SEBI guidelines Sample financing plans
Unit 12	Project risk analysis: Sources, measures, perspectives on risk, techniques for risk analysis, managing risk and project selection under risk.
Unit 13	Project risk analysis techniques: Sensitivity analysis, scenario analysis, break-even analysis, Hillar Model, simulation analysis, decision tree analysis
Unit 14	Organizing systems and procedures for project implementation: Working and design of the system, work breakdown structure (WBS), project execution plan (PEP), project procedure manual, and control systems
Unit 15	Project time-cost trade off: Critical path method (CPM), project crashing, trade-off

	procedure, updating project progress
Unit 16	Resource allocation: resource levelling, resource smoothing, loading chart
Unit 17	Social cost-benefit analysis: Meaning and rationale for SCBA, UNIDO approach and little mirrless approach
Unit 18	Environment appraisal of Projects: Introduction, Types and Environmental Dimensions of a Project, Stresses on Environment, Environmental Impact Assessment Methodologies
Unit 19	Project Report: Concept, elements of project report, the importance of DPR, the concept of a business plan and major components of the business plan
Unit 20	Project review and administrative aspects: Control of in-progress aspects, post-completion audits, abandonment analysis, agency problem

READINGS:

1. PROJECTS-PLANNING, SELECTION, FINANCING, IMPLEMENTATION, AND REVIEW by PRASANNA CHANDRA, SIXTH EDITION, TATA MCGRAW HILL
2. PROJECT MANAGEMENT by CLIFFORD F. GRAY AND ERIK W. LARSON, TATA MCGRAW HILL

Course Code	DEMGN802	Course Title	EXPORT AND IMPORT MANAGEMENT
			WEIGHTAGE
			CA
			ETE (Th.)
			30
			70

Course Outcomes: Through this course, the student will be able to

CO1: identify the major export and import documents required by banks, governments, and transportation and insurance companies to start an export business.

CO2: appraise the role of institutions involved in promotion of international trade.

CO3: evaluate all available export incentives and duty exemption schemes offered by government.

CO4: comprehend the process of export financing and international customs clearance operations.

Unit No.	Content
Unit 1	Foreign Trade: Institutional framework and export import documentation, Role of WTO, exporting as an entrepreneur - steps, role of government and semi government agencies in export promotion.
Unit 2	Export-Import Documentation and Steps: Steps for successful exporting, export-import documentation.
Unit 3	Export Import Payments: Methods of payments, financing exporters and importers, instruments of payments.
Unit 4	Export-Import Strategies and Practices: Export-import business plan and strategy, export strategy formulation, export financing, import strategy.
Unit 5	Export Marketing: International marketing, export marketing - going global, globalization, different forms of international trade.
Unit 6	Methods of Financing Exporters: Pre-shipment finance, post-shipment export advance, factoring, insurance.
Unit 7	Business Risk Management and Coverage: Risk management in export-import business, types of risks, quality, and pre-shipment inspection
Unit 8	Custom Clearance of Import and Export Cargo: Clearance of import cargo, clearance of export cargo, customs valuation.
Unit 9	Harmonized Systems: Importance of harmonized system, carnets, new developments in customs clearance procedure
Unit 10	Logistics: Planning physical distribution, benefits of an efficient logistics system.
Unit 11	Characteristics of Modes of Transportation: Marketing logistic system, critical elements of the logistic system, international transport system
Unit 12	Characteristics of Shipping Industry: History, characteristics, role of intermediaries in shipping industry, latest trends in logistics operations, ocean freight structure.
Unit 13	World Shipping: Overview of ports, shipping conferences, freight methods.
Unit 14	Conferences: United Nations Code of conduct for liner conferences, liner and tramp operations, types of ships, and international trade
Unit 15	Containerization: History, types, benefits of containerization, container leasing practices, inland container depots.
Unit 16	Export Procedures and Documents: Processing an export order, negotiation of documents, role of banks in an export import transaction.
Unit 17	Information Technology and International Business: Electronic procurement, electronic marketing, electronic logistics.

Unit 18	Incoterms: Incoterms, purpose and scope of incoterms, structure of incoterms, incoterm groups.
Unit 19	Export Incentive Schemes: Duty exemption schemes, duty remission schemes, export promotion capital goods scheme, special economic zones.
Unit 20	World Trade Organization: GATT and WTO, agreements and implications of World Trade Organization.

READINGS:

1. EXPORT IMPORT MANAGEMENT by JUSTIN PAUL & RAJIV ASERKAR, OXFORD UNIVERSITY PRESS
2. FOREIGN TRADE - THEORY, PROCEDURES, PRACTICES AND DOCUMENTATION by DR. KHUSHPAT S. JAIN AND DR. APEXA V. JAIN, HIMALAYA PUBLISHING HOUSE PVT. LTD.

Course Code	DEOPR512	Course Title	INTERNATIONAL TRADE LOGISTICS	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

CO1: discuss the key objectives for studying international trade logistics.

CO2: analyze the challenges in information processing in international trade logistics.

CO3: summarize emerging risks.

Unit No.	Content
Unit 1	Introduction to international trade logistics: Concept of trade logistics, evolution and development of international trade logistics, interfaces of marketing and trade logistics, importance of trade logistics to the nation, importance of trade logistics for the industry
Unit 2	Information and order processing: Challenges in information processing, logistics information systems, logistics operations management, scrutiny of export order, clarifications and order confirmation
Unit 3	Labelling and marking in international logistics: Introduction, labelling in international trade, considerations in labelling for international trade, labels and preferences for colors, numbers and shapes, labels as promotional tool, markings of export consignments, increasing role of CE markings
Unit 4	Packing and Packaging: Introduction, need for packaging in trade logistics, packing vs packaging, packing list vs packing note, packaging and transport hazards, choice of packing material for international logistics
Unit 5	Inventory management in trade logistics: Nature of inventory in trade logistics, motivations for holding inventory in international logistics, contemporary developments in inventory management, models of inventory in trade logistics.
Unit 6	Integrated logistics and sub-system elements: Evolutionary phase of integrated logistics services, third party logistics, choosing a 3PL provider, sub-system elements in trade
Unit 7	Choice of mode of transportation: Importance of transportation decision, factors affecting choice of transport mode, transport mode selection, type of transport mode and modal characteristics, types of transport carriers
Unit 8	Role of dry ports in trade logistics: Introduction, concept of dry ports, advantages of dry ports, increasing role of dry ports, functions of dry ports, facilities at dry ports, export clearance at dry ports, import clearance at dry ports, challenges in growth of dry ports in India
Unit 9	Warehousing: Concept of warehousing, functions of warehousing, need and benefits of warehousing, documents in warehousing, types of warehousing, free trade and warehousing zones, procedure of warehousing the imported and exportable cargo for importers
Unit 10	Incorporating shipping terms: Introduction, factors influencing the choice of delivery terms, purpose and scope of shipping terms, types of incoterms, applicable incoterms in different modes of transportation, incoterms and transfer of risks, incoterms and freight payment in trade logistics, choosing incoterms for international trade deals.
Unit 11	Containerization in trade logistics: Introduction, concept and evolution of containerization, standardization of containers, air cargo containerization, double stack containerization in trade logistics, advantages of containers in trade logistics, numbering and marking of containers, classification of containers, stuffing plan for cargo container owning, leasing and hiring of cargo containers

Unit 12	Multimodal Transportation: introduction, concept of multimodal transport, context and regulation of multimodalism in India, advantages of multimodal transport, forms of multimodal transport operations, multimodal transport document, challenges and suggestions for improving multimodalism in India
Unit 13	Liner shipping and freighting practices: introduction, concept and evolution of liner conference, global nature of liner industry, designing a liner service schedule, concentration in liner shipping, freighting and tariff practices of ocean liners
Unit 14	Tramp shipping and chartering clauses: introduction, concept and features of tramp shipping, commercial organization of tramp shipping, types of chartering, main clauses of charter party, procedure of chartering a ship, vessel or yacht, tramp freights practices.
Unit 15	Freighting principles and practices in trade logistics: introduction, freight and tariff defined, determinant of freight rate, constituents of freight rates, freighting practices in international logistics, discounting practices in freighting, modalities and timing of freight payment, shipowner's possessory liens, liners freight determination criteria
Unit 16	Documentation in trade logistics: introduction, need for documentation in trade logistics, commonly used documents in trade logistics, documents prepared by carrier, documents prepared by exporter and importer
Unit 17	Risks in international trade logistics: introduction, myriad risks in international trade logistics, managing risks in international trade logistics
Unit 18	Cargo insurance and claim procedure: introduction, need for cargo insurance, cargo risk coverage, comparison of institute cargo clauses, principles of cargo insurance, nature of risks to cargo, types of cargo insurance policies, claims procedure in cargo insurance, substantiation of cargo insurance claim
Unit 19	Understanding and preventing maritime fraud: introduction, maritime frauds explained, types of maritime frauds, preventive maritime frauds
Unit 20	Role of intermediaries in trade logistics: introduction, role of trade logistics intermediaries, types of intermediaries in international trade logistics, role of freight forwarders

READINGS:

1. INTERNATIONAL TRADE LOGISTICS by RAM SINGH, OXFORD UNIVERSITY PRESS
2. BUSINESS LOGISTICS / SUPPLY CHAIN MANAGEMENT by RONALD H BALLOU, SAMIR. K SRIVASTAVA, PEARSON

Course Code	DEEC0522	Course Title	INTERNATIONAL ECONOMICS
			WEIGHTAGE
			CA ETE (Th.)
			30 70

Course Outcomes: Through this course, the student will be able to

C01: review the conceptual understanding of international trade and economy.

C02: interpret the theories of trade in light of Indian trade and evaluate their implementation.

C03: analyse historical as well as contemporary issues in trade theory and policy using a variety of lenses.

C04: evaluate the role of international financial systems and foreign exchange markets.

C05: editorialize the trade and commercial policies including protectionism and liberalism.

C06: assess the price adjustment mechanism in the context of stabilization policy.

Unit No.	Content
Unit 1	Introduction: importance of international economics, international trade and nation's standard of living, subject matter of international economics, purpose of international economics theories and policies, current international economic problems
Unit 2	International trade theory: mercantilists view on trade, trade based on absolute and comparative advantage, comparative advantage and opportunity cost, factor endowment and Hecksher - Ohlin theory, Stolper-Samulson theorem, Leontief paradox and factor reversal
Unit 3	Kravis and Linder theory of trade: role of dynamic factors, i.e. changes in tastes, technology and factor endowments in explaining the emergence of trade; Rybczynski theorem – concept and policy implications of immiserizing growth; causes of emergence and measurement of intra industry trade and its impact of developing economies.
Unit 4	Gains from trade and terms of trade: gains from trade, distribution of gains, special gains to small countries, disadvantages and trade, meaning and types of terms of trade, Mill's doctrine, offer curves and equilibrium terms of trade, effects of change in demand and supply, problems of measurement of terms of trade
Unit 5	Problems of Trade in Primary Commodities: Prebisch-Singer hypothesis of unequal distribution of gains, critique of secular stagnation of Terms of Trade
Unit 6	Trade restrictions: meaning of tariff, partial equilibrium analysis of a tariff, theory of tariff structure, general equilibrium analysis of a tariff in a small country, optimum tariff, non tariff trade barriers and new protectionism, political economy of protectionism
Unit 7	Rationale for protection: Infant industry argument; concept of effective protection; political economy of Non-Trade Barriers (NTB). Regionalism versus Multilateralism; regional integration among developing countries-SAARC; import substitution and industrialization
Unit 8	The political economy of non-tariff barriers and their implications: nominal, effective and optimum rates of tariffs – their measurement, impact and welfare implications
Unit 9	Exchange rates determination: introduction, purchasing power parity theory, monetary approach to the balance of payment and exchange rates, asset market model and exchange rates, exchange rate dynamics
Unit 10	Foreign exchange markets: functions, foreign exchange rates, spot and forward rates, foreign currency swaps, futures and options, foreign exchange risk, hedging and speculation

Unit 11	Price adjustment mechanism: adjustment with flexible exchange rates, effect of exchange rate changes on domestic prices and the terms of trade, stability of foreign exchange markets, elasticities in real world
Unit 12	Balance of payments: introduction, balance of payment accounting principles, accounting balances and disequilibrium in international transactions
Unit 13	Foreign Direct Investment and Multinational Firms: Targeting sectors for foreign financial capital flows and welfare implications, foreign finance capital and skill formation, interest cut on foreign capital.
Unit 14	TRIPS and Developing Economies: Product standard, parallel imports, innovations and welfare, Trips, innovation and growth.
Unit 15	International Outsourcing and off Shoring and Industrialization Strategies: Concepts, measurements and magnitudes of outsourcing and off-shoring, costs-benefits of off shoring and international outsourcing
Unit 16	Exports Processing Zones: Introduction to exports processing zones as development strategy, EPZs and welfare in developing countries.
Unit 17	Trade, Poverty, and Readjustments: Effects of trade liberalization on welfare, poverty and trade readjustments, informal sector, trade and poverty, the political economy of trade policy.
Unit 18	International Trade and Development Paradigms: Development crisis and globalization as a universal development strategy, export pessimism and inward-looking development strategy, combating the crisis in Europe & the USA
Unit 19	International monetary system: introduction, Bretton woods system, operation and evolution of the Bretton Wood system, international monetary system: present and future
Unit 20	Emerging international monetary system with special reference of post-maastricht developments and developing countries: reform of the international monetary system, India and developing countries; portfolio and foreign direct investments; international debt crisis. unctad/imf: need, adequacy and determinants of international reserves; conditionality clause of imf and world bank and Asian development bank – their achievements and failures; wto and world bank from the point of view of India.

READINGS:

1. INTERNATIONAL ECONOMICS: TRADE AND FINANCE by DOMINICK SALVATORE, WILEY
2. INTERNATIONAL ECONOMICS by PAUL KRUGMAN, MAURICE OBSTFELD, MARC MELITZ, PEARSON
3. INTERNATIONAL ECONOMICS by K C RANA AND K N VERMA, VISHAL PUBLISHING CO

Course Code	DEMKT804	Course Title	FOUNDATION OF DIGITAL MARKETING	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

- CO1:** comprehend how to promote business effectively online and develop a targeted online marketing strategy that engages potential customers throughout the digital landscape.
- CO2:** develop skills to maximize email marketing campaigns, optimal audience outreach, and analyze customer interactions and data.
- CO3:** use basic mobile marketing concepts and trends, develop a strategy that works for business, and optimize strategy.
- CO4:** develop skill for creating, promoting and measuring valuable and relevant content aiming to attract and engage a profitable audience.
- CO5:** construct highly engaging and intuitive content that resonates with audience and defining a content marketing strategy for conversions organically.

Unit No.	Content
Unit 1	Introduction and digital landscape: Introduction, outline, schedule and ground rules – evolution
Unit 2	New Technologies: Emerging technologies, adoption and impact of digital technologies
Unit 3	Research and elements of digital: Researching of digital - consumer, product, competition
Unit 4	Core elements of digital: Web, mobile, email, search, social media, content & advertising
Unit 5	Gearing up for digital and digital strategy: Digital in the industry, organization and business
Unit 6	Gearing for digital: Key skills, traits and attitudes, digital strategy and frameworks
Unit 7	Content marketing concepts and strategy: Content marketing, types of content marketing, content intent
Unit 8	Online communities: Community management, content marketing strategy
Unit 9	Social communities: Social listening, competitor analysis, content audit, case studies
Unit 10	Introduction to SEO: Search Engine Optimization foundation, Black hat SEO, White SEO
Unit 11	PPC and digital analytics: On-Page SEO, Off-Page SEO, Basics of Pay per click /AdWords
Unit 12	Marketing automation: Email marketing, automate repetitive marketing tasks, track and measure campaign performance
Unit 13	Marketing optimization: Techniques to improve ROAS (Return on Ad Spend) - landing Page optimization, Campaign optimization and Ads Optimization
Unit 14	Social media marketing-I: Goals, channel and tools of social media
Unit 15	Social media marketing-II: An introduction, analyse social media tools and implementation of social media marketing
Unit 16	Mobile marketing: Introduction to mobile marketing, opportunity, advertise, analyse mobile marketing
Unit 17	E-Mail Marketing: Process, design and content, effective email marketing campaigns

Unit 18	Digital display advertising: Industry overview, define, configure and analyse display advertising
Unit 19	Analytics: Introduction to types of analytics, goals, KPI and reports
Unit 20	Strategy and Planning: Introduction, approach, activities and analysis

READINGS:

1. THE ART OF DIGITAL MARKETING: THE DEFINITIVE GUIDE TO CREATING STRATEGIC, TARGETED AND MEASURABLE ONLINE CAMPAIGNS by IAN DODSON, WILEY
2. FUNDAMENTALS OF DIGITAL MARKETING by PUNEET SINGH BHATIA, PEARSON
3. DIGITAL MARKETING by SEEMA GUPTA, MCGRAW HILL EDUCATION
4. DIGITAL MARKETING by VANDANA AHUJA, OXFORD UNIVERSITY PRESS

Course Code	DEMKT805	Course Title	SOCIAL MEDIA MARKETING	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

C01: describe the social media and develop skill to use various channels in order to implement marketing strategy.

C02: use principles of consumer and social psychology to develop social media content and campaigns that engage consumers.

C03: describe the major social media marketing portals that can be used to promote a company, brand, product, service or person.

C04: develop effective social media marketing strategies for various types of industries and businesses.

Unit No.	Content
Unit 1	Understanding social media marketing: Importance of social media, changing role of social media marketer, understanding the role of the influencer, types of influencers, comparison of social media platforms with other marketing efforts
Unit 2	Social media competitors: Classify consumer activities, identification of personas, analyzing competitor efforts
Unit 3	Social media marketing strategy: Strategic planning and social media marketing, deepening social media marketing relationship, difference between social media marketing and brand marketing
Unit 4	Social media marketing campaigns: Types of campaigns, characteristics of a good campaign, planning of marketing campaign
Unit 5	Developing social media marketing voice: Importance and characteristics of SMM voice, difference between SMM voices and brand choices, SMM voice objectives, selection of owner of organization's SMM voice
Unit 6	Finding the right platforms: Choosing social media platforms, evaluation of resources, use of platforms as audience research tools
Unit 7	Marketing on Facebook: Facebook basics, Facebook pages, Facebook groups, Facebook events, Facebook applications and Facebook connect
Unit 8	Marketing on Twitter: Twitter basics, Twitter handle, following and followers, using promoted accounts, sponsored tweets
Unit 9	Instagram marketing: Basics, content creation, engagement, Instagram ads, Instagram stories
Unit 10	YouTube strategy: YouTube basics, promotion on YouTube, seeding a viral campaign, advertising on YouTube
Unit 11	Linkedin marketing: Basics, creating a new profile, participating in groups, using LinkedIn answers
Unit 12	Marketing via niche markets and online communities: Niche social networks, finding the right social platforms, unpaid media basics
Unit 13	Accounting for the influencers: Knowing and reaching the expert influencers, tapping and reaching the referent influencers, tapping and reaching the positional influencers
Unit 14	Social media marketing and website: Making the campaign and website work together, Facebook social plugins
Unit 15	Becoming an authentic and engaged advertiser: Social advertising, app advertisements, paid and earned media
Unit 16	Building an SMM mobile campaign: Consumer trends in mobile, mobile phone

	capabilities, harnessing mobile to support social media
Unit 17	Social media metrics: Influencer specific metrics, Facebook metrics, Instagram metrics, YouTube metrics, Twitter metrics
Unit 18	Employees and social media marketing: Employees collaboration, types of social software, importance of intranet
Unit 19	Social media governance and tools: Public relations, consumer relations, social media governance models, social media crisis
Unit 20	Real time marketing: Introduction, real time insights, response, engagement studios, co-creation, distribution and engagement

READINGS:

1. SOCIAL MEDIA MARKETING by SHIV SINGH AND STEPHANIE DIAMOND, WILEY INDIA
2. SOCIAL MEDIA ANALYTICS by MATTHEW GANIS, AVINASH KOHIRKAR, PEARSON EDUCATION INDIA
3. SOCIAL MEDIA MARKETING by TRACY L. TUTEN, MICHAEL R. SOLOMO, SAGE PUBLICATIONS

Course Code	DEMKT806	Course Title	SEARCH ENGINE OPTIMIZATION
			WEIGHTAGE
			CA ETE (Th.)
			30 70

Course Outcomes: Through this course, the student will be able to

CO1: articulate the role of SEO in web and content strategies.

CO2: research and define the keywords for ranking websites in order to gain competitive advantage.

CO3: examine how to analyze, organize, create, and build content utilizing various strategies.

CO4: gain access to online tools and resources to help implement successful SEO campaigns.

CO5: discuss the process of effective web pages indexing by search engines and tracking the outcomes.

Unit No.	Content
Unit 1	Introduction to search engines: users of search engines, SERPs, elements of keyword rankings, minor, major and meta search engines, relationship between search engines
Unit 2	Recognizing and reading SERP: reading SERP results, effects of blended search, googles' knowledge graph, semantic search and Hummingbird approach
Unit 3	Appearing in right results: avoiding spam, relationship between behavior and ranking, intent-driven search, getting into local search results, using paid ads
Unit 4	Drivers of search results: power user search, using advanced operators, long-tail and short-tail keywords, using predictive research
Unit 5	Spamming search engines: types of spam, doorway pages, cloaking, stuffing, discovering and reporting spam, ethical SEO
Unit 6	Keyword research and selection: theme related keywords, industry/competitor research, client niche keywords, seasonal keywords, using phrases, keyword vs. semantic search
Unit 7	Exploiting pay per click: analyzing PPC, testing keywords through PPC, brand building, cost reduction techniques, eliminating low click-through keywords
Unit 8	Assigning and adding keywords to pages: site theme planning, creating pages to attract attention, site organization, theme consolidation, keyword densities and updation, tools to aid keyword
Unit 9	Competitive research techniques: calculating ranking requirements, competitor identification, running page analyzer and spreadsheet tools
Unit 10	SEO web design: preplanning, site navigation, content and themes, implementing site search, embedding engagement objects, building usability and call to action
Unit 11	Page experience update: mobile usability, security issues; HTTPS usage, trusted hosting and servers, core web vitals, enhancing ad experience
Unit 12	Search engine compatibility techniques: compatibility elements; coding, SIFR, HTML and W3C, formulating category structure, navigation types, linking techniques
Unit 13	Content creation: audience research, personas; creation, usage and drawbacks, content depth and page length, maximizing readability, content optimization, enabling UGC
Unit 14	Keyword implementation: keyword lists, using keywords; relevance, stopwords, depth, HTML, single page analyzer, keyword integration
Unit 15	Content optimization: adapting to local search, pigeon algorithm, duplicate content management, content creating, brand building through SEO, embedding engagement objects, communities online
Unit 16	Employing linking strategies: web analytics evaluation, PPC programs, siloing,

	physical & virtual, inbound links; link magnets, link bait, link buying
Unit 17	Internal and social linking strategies: link equity, creating silos, traditional sitemaps, XML sitemaps, obtaining links, link vetting, using blogs, networking sites, social signals
Unit 18	SEO optimization: server issues, domain names, using redirects, backend content management, solving SEO roadblocks; inviting spiders, avoiding hijacks, handling secure server problems
Unit 19	Analyzing SEO results: site analytics, web analytics measurement, google analytics, log file analysis, measuring website usability, tailoring marketing messages for audience
Unit 20	International SEO: targeting international audience, identifying and quantifying opportunities in various countries; Asia, Europe and Latin America

READINGS:

1. SEARCH ENGINE OPTIMIZATION- ALL IN ONE FOR DUMMIES by BRUCE CLAY AND KRISTOPHER B. JONES, WILEY
2. THE ART OF SEO by STEPHAN SPENCER, ERIC ENGE AND JESSIE STRICCHIOLA, O' REILLY

Course Code	DECAP399	Course Title	MANAGING INFORMATION SYSTEM
			WEIGHTAGE
			CA ETE (Th.)
			30 70

Course Outcomes: Through this course, the student will be able to
CO1: discuss the basic concepts of managing an information system.
CO2: understand concept of redesigning the organization with information systems.
CO3: demonstrate the security and control of information systems.
CO4: identify data resources and IT usage on different platforms.

Unit No.	Content
Unit-1	Managing the digital firm: Digital convergence and the changing business environment, perspectives on information systems, business perspective on information systems
Unit-2	Dimensions of information systems: Contemporary approaches to information systems, learning to use information systems, new opportunities with technology
Unit-3	Information system in the enterprise: Major types of systems in organizations, four major types of systems, relationship of systems to one another, systems from a functional perspective
Unit-4	Information technology infrastructure and platforms: Levels of IT infrastructure, evolution of IT infrastructure, technology drivers of infrastructure evolution, infrastructure components
Unit-5	Managing data resources: Organizing data in a traditional file environment, the database approach to data management, types of databases, hierarchical and network DBMS, object-oriented databases, designing databases, distributing databases, database trends
Unit-6	Data processing: Data warehouses and data mining, the web and the hyper media databases, linking internal databases to the web, cost benefit consideration, data administration
Unit-7	Managing knowledge in the digital firm: The knowledge management landscape, important dimensions of knowledge, knowledge management value chain
Unit-8	Types of knowledge management systems: Types of knowledge management systems, enterprise-wide management systems, structured and semi structured knowledge systems, knowledge network systems
Unit-9	Knowledge work systems: Knowledge workers and knowledge work, requirements of knowledge work systems, intelligent techniques, expert systems, case-based reasoning, fuzzy logic systems, neural networks, genetic algorithms, hybrid AI systems, intelligent agents
Unit-10	Enhancing decision making for the digital firm: Decision making & decision support systems, systems for decision support, group decision support systems, executive support in the enterprise, management opportunities challenges & solutions
Unit-11	Redesigning the organization with information systems: Systems as planned organizational change, business process re-engineering & process improvement, overview of systems development, system analysis, systems design, alternative system building approaches, traditional systems life cycle, proto typing, end user development
Unit-12	Information systems security & control: Internet vulnerabilities, systems vulnerability & abuse, wireless security challenges, malicious software, hackers and cyber vandalism, computer crime and cyber terrorism, business value of security & control, technologies & tools for security and control, access control, firewalls, intrusion detection systems, encryption and public key infrastructure

Unit-13	Business functions and processes: Functional areas of operation, business processes development and related technologies, significance of developing ERP, radio frequency identification, mobile technology
Unit-14	Marketing information systems: marketing, sales, customer relationship management system, sales order process
Unit-15	Production and supply chain management information systems: production, approach towards planning, supply chain management, accounting in enterprise resource planning, accounting concept, concept of finance, financial accounting, managerial accounting
Unit-16	ERP modules: MRP-II, plant maintenance module, quality management module, supplier performance module
Unit-17	ERP lifecycle implementation-I: ATO, MTO, CTO, ETO, reengineering, Gap analysis, project planning, pre-evaluation screening
Unit-18	ERP market-I: Case study Oracle at CISCO system, SAP and its technologies, Baan, Oracle, QAD, SSA, faster implementation methodologies, new market and channels
Unit-19	Cycle time and lead time: CAD/CAM, MRP, DPR, reduction in cycle time, lead time and cost, improved resources utilization
Unit-20	Introduction to Big Data: Data, Definition of Big Data, understanding the four v's, building models to understand the occurrence of rare events in data, understand the characteristics of web and social networks

READINGS:

1. MANAGEMENT INFORMATION SYSTEMS-MANAGING THE DIGITAL FIRM by KENNETH C. LAUDON & JANE P. LAUDON, PEARSON
2. MANAGEMENT INFORMATION SYSTEM, CONCEPTUAL FOUNDATIONS, STRUCTURE & DEVELOPMENT by GORDAN B. DAVIS AND MARGRETTE H. OLSAN, MCGRAW HILL EDUCATION
3. MANAGEMENT INFORMATION SYSTEMS by RAMESH BEHL, JAMES A. OBRIEN, GEORGE M. MARAKAS, MCGRAW HILL EDUCATION

Course Code	DECAP517	Course Title	DATABASE MANAGEMENT SYSTEMS						
			WEIGHTAGE						
			<table border="1"> <tr> <td>CA</td> <td>ETE(Th.)</td> <td>ETE (Pr.)</td> </tr> <tr> <td style="text-align: center;">30</td> <td style="text-align: center;">40</td> <td style="text-align: center;">30</td> </tr> </table>	CA	ETE(Th.)	ETE (Pr.)	30	40	30
CA	ETE(Th.)	ETE (Pr.)							
30	40	30							

Course Outcome

- CO1:** analyze the relational database model to understand the Logical and Physical aspects of the DBMS architecture
- CO2:** apply refined queries to fetch information from large datasets.
- CO3:** understand the normalization theory and apply such knowledge to normalization of a database.
- CO4:** apply and relate the concept of transaction, concurrency control and recovery in database.
- CO5:** describe the principles of storage structure and recovery management.
- CO6:** discuss distributed databases and be familiar with cloud databases.

Unit No.	Contents
Unit 1	Introduction to fundamentals of DBMS: Database applications, Purpose of database systems, Components of DBMS, DBMS Architecture, Different Data Models, Data Independence, Various types of constraints.
Unit 2	Database design and ER model: Overview of Design process, Entity relationship model, constraints, ER Diagrams, ER Design issues, Weak entity sets, extended ER features
Unit 3	Relational Databases: Relational Model, Structure of Relational databases, fundamental, additional and extended
Unit 4	Relational algebra operations: Views, DDL statements in SQL, DML statements in SQL, JOINS
Unit 5	SQL (DDL): Implementation of Data Definition Language, data types, schema definition, Basic structure of SQL Queries- CREATE, ALTER, DROP and RENAME, TRUNCATE.
Unit 6	SQL (DML): DML commands - SELECT, INSERT, DELETE and UPDATE operations, implementation of constraints, implementation of joins, Nested sub queries, Complex queries, Views, Joined relations.
Unit 7	Relational Languages: Tuple Relational calculus, Domain relational calculus, Query by Example, Data log.
Unit 8	Set Operations: UNION, INTERSECT, EXCEPT, Aggregate Functions, NULL values.
Unit 9	Relational Database Design: Features, Atomic Domains and first normal form, Functional dependency theory decomposition using functional dependencies, decomposition using
Unit 10	Multivalued dependencies: more normal forms, database design process.
Unit 11	Concurrency Control: Lock based protocols, Timestamp based protocols, and Validation based protocols, Deadlock handling, Insert and Delete operations, Weak levels of consistency.
Unit 12	SQL (DCL/TCL): implementation of GRANT, REVOKE, ROLLBACK, COMMIT, SAVEPOINT, implementation of aggregate functions
Unit 13	Implementation of inbuilt character: functions, implementation of inbuilt numeric functions, implementation of inbuilt date & time functions

Unit 14	Recovery system: Failure classification, storage structure, recovery and atomicity, log- based recovery
Unit 15	Recovery with concurrent transactions: buffer management, failure with loss of non-volatile storage
Unit 16	Distributed Databases: Distributed Databases, Data Fragmentation, Replication and Allocation Techniques, Semi Join, Homogeneous and Heterogeneous Databases, Distributed Data Storage, Distributed Transactions
Unit 17	Cloud-Based Databases: From collaborative to the Cloud – A short history, Introduction to Client – Server Computing, Peer-to-Peer Computing
Unit 18	Distributed Computing: Grid Computing, Collaborative Computing, Cloud Computing. Functioning of Cloud Computing, Differences between Distributed computing and Cloud computing
Unit 19	Transaction Management: Concept of Transaction, Transaction State, Implementation of atomicity and durability, concurrent execution, Serializability, Recoverability, Implementation of Isolation, testing for Serializability.
Unit 20	Introduction to PL/SQL: introduction to PL/SQL blocks, conditional statements, loops, cursors and triggers.

LABORATORY WORK:

1. SQL (DDL): Implementation of Data Definition Language, data types, schema definition, Basic structure of SQL Queries- CREATE, ALTER, DROP, RENAME, TRUNCATE.
2. SQL (DML): DML commands - SELECT, INSERT, DELETE and UPDATE operations, implementation of constraints, implementation of joins, Nested sub queries, Complex queries, Views, Joined relations.
3. SQL (DCL/TCL): implementation of GRANT, REVOKE, ROLLBACK, COMMIT

READINGS:

1. H. F. KORTH& A. SILBERSCHATZ, DATABASE SYSTEM CONCEPTS, PUBLISHERS: TATAMCGRAW HILL, NEW DELHI, YEAR 2006
2. IVAN BAYROSS, SQL, PL/SQL THE PROGRAMMING LANGUAGE OF ORACLE, BPB PUBLICATION.
3. ELMASRI&NAVATHE, FUNDAMENTALS OF DATABASE SYSTEMS, ADDISON &WEISELY, NEW DELHI.
4. C. J. DATE, DATABASE SYSTEMS, PRENTICE HALL OF INDIA, NEW DELHI.
5. P. BHATIA & G. SINGH, SIMPLIFIED APPROACH TO DBMS, KALYANI PUBLISHERS.
6. MARTIN GRUBER, UNDERSTANDING SQL, BPB PUBLICATION, NEW DELHI.
7. VAL OCCARDI, RELATIONAL DATABASE: THEORY & PRACTICE, BPB PUBLICATION, NEW DELHI.

Course Code	DECAP518	Course Title	DATA ANALYTICS WITH PYTHON
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WEIGHTAGE		
CA	ETE (Th.)	ETE (Pr.)
30	0	70

Course Outcomes: Through this course, the student will be able to

CO1: understand the basic structure and features of Python programming.

CO2: interpret object-oriented programming concepts such as encapsulation, inheritance and polymorphism as implemented in Python.

CO3: apply pandas and NumPy for data analysis.

CO4: implement machine learning algorithms.

CO5: analyze real-life situation specific problems and perceive solutions.

CO6: build exploratory data analysis and visualizations.

Unit No.	Content
Unit- 1	Python basics: Introduction, data types and operators
Unit- 2	Control Statements and functions: conditional statements, branch statements and loop statements, types of functions
Unit- 3	Python data structures: strings, lists, sets, tuples and dictionaries
Unit- 4	OOP concepts: OOP features, encapsulation, inheritance
Unit- 5	More on OOP concepts: function overloading, operator overloading and method overriding,
Unit- 6	Exception handling: catching exceptions, catching multiple exceptions, raising exceptions, custom exception
Unit- 7	Introduction to NumPy: arrays vs lists, array creation routines, arrays from existing data, indexing and slicing
Unit- 8	Operations on NumPy arrays: array manipulation, broadcasting, binary operators
Unit- 9	NumPy functions: mathematical functions, statistical functions,
Unit- 10	NumPy functions for sorting, searching and counting functions
Unit- 11	Handling data with pandas: Introduction to pandas, series, Dataframe, sorting
Unit- 12	Working with csv File using NumPy, Operations on files using NumPy
Unit- 13	Data cleanup: Investigation, matching and formatting
Unit- 14	Data visualization: Introduction to matplotlib, line plot, multiple subplots in one figure
Unit- 15	More about Data visualization: bar chart, histogram, box and whisker plot,
Unit- 16	More about Data Visualization: scatter plot, pie charts
Unit- 17	Introduction to seaborne: seaborne, seaborne Vs matplotlib, data visualization using seaborne
Unit- 18	Machine learning: Introduction, types of machine learning
Unit- 19	Machine learning algorithms: linear regression, k-nearest neighbors
Unit- 20	More about ML: decision trees, random forests, k-means clustering

LABORATORY WORK:

Implementation of Python programming concepts (control statements, functions, strings, lists, sets, tuples, dictionaries, OOP concepts, exception handling, NumPy arrays and functions, pandas, data visualization, machine learning algorithms)

READINGS:

1. PROGRAMMING AND PROBLEM SOLVING WITH PYTHON by ASHOK KAMTHANE, AMIT ASHOK KAMTHANE, MCGRAW HILL 2ND EDITION

2. HANDS-ON DATA ANALYSIS WITH NUMPY AND PANDAS by CURTIS MILLE, KINDLE EDITION
3. PYTHON FOR DATA ANALYSIS by WES MCKINNEY, O'REILLY MEDIA
MACHINE LEARNING FOR ABSOLUTE BEGINNERS by OLIVER THEOBALD, KINDLE EDITION

Course Code	DEMG551	Course Title	SPREADSHEET MODELLING USING EXCEL		
			WEIGHTAGE		
			CA	ETE (Th.)	ETE (Pr.)
			30	0	70

Course Outcomes: Through this course, the student will be able to

- C01:** demonstrate the principles of a good spreadsheet design and effectively present the analysis and results.
- C02:** obtain basic knowledge of commonly used analytic tools in processing quantitative information and making quantitative business decisions.
- C03:** analyze data using excel functions and various data management tools in order to gain greater insights to key business drivers.
- C04:** develop robust and dynamic models that automatically change through the use of text, date and time functions.
- C05:** develop VBA spread sheet-based solutions to financial problems.
- C06:** apply macros for automating tasks in spreadsheet for efficient decisions and effectively present the analysis and results.

Unit No.	Content
Unit 1	Introduction to Spreadsheets: history and importance of spreadsheet, navigating a spreadsheet
Unit 2	Spreadsheet Basics: crafting formulas, common errors in spreadsheets, differences between Sheets and Excel
Unit 3	Basic functions and utilities I: data entry, introduction to fill handles
Unit 4	Basic functions and utilities II: managing rows and columns, protecting worksheets and workbooks
Unit 5	Spreadsheet Calculations: Introduction to range, absolute and relative references
Unit 6	Spreadsheet Formulae and Functions: formulas and functions, calculation across sheets
Unit 7	Formatting Spreadsheets I: formatting the excel sheet, introduction to borders
Unit 8	Formatting Spreadsheets I: alignment tools, introduction to number formats
Unit 9	Data Analysis: find and replace functions, text functions, filtering, sorting, conditional formatting
Unit 10	Spreadsheet Printing: introduction to spreadsheet printing, print preview and adjustments, orientation, margins and scale, headers and footers
Unit 11	Charts and Graphs: basic chart types, move and resize charts, change chart styles and types, Modification in chart elements
Unit 12	Elementary Modelling: IF statement analysis, nested if, COUNTIF and COUNTIFS, SUMIF and SUMIFS, AVERAGEIF and AVERAGEIFS
Unit 13	Lookup Functions: Vlookup, Hlookup, Index and match function
Unit 14	Pivot Table and its Applications: introduction to pivot table, filter data using slicers in multiple pivot table, visualize aggregate data using pivot table

Unit 15	VBA Macros programming I: create and record macro in spreadsheet, Msg box, declaring variables, writing a subroutine and function in VBA
Unit 16	VBA Macros programming II: IF Then statement, Case statement, For loop, While loop and Do until, worksheet and range object
Unit 17	Sensitivity Analysis: goal seek, data table, scenario Analysis
Unit 18	Simulation and Optimization: Monte Carlo simulations, introduction to solver, linear programming for optimization, Intrinsic value calculation models
Unit 19	Excel dashboard: introduction, Differences from Reports, creating a dashboard
Unit 20	Excel dashboard: Best practices for creating visually effective Excel Dashboards, Improve your Excel Dashboard, Excel Dashboards Do's and Don'ts

List of Practicals/ Experiments:

Basic spreadsheet functions	• basic functions and utilities
	• text functions
	• sorting and filtering data
	• graphs
Elementary modelling I	• if statement analysis
	• countif, countifs, sumif, sumifs
	• conditional formatting
Elementary modelling II	• lookup functions
	• pivot table and its applications
	• filter data using slicers in multiple pivot table
	• dashboard: visualize aggregate data using pivot table
Sensitivity analysis	• goal seek
	• data table
	• scenario analysis
Macros	• recording macros
	• running macros
	• use relative references in macros
	• deleting recorded macros
VBA macros programming	• create and record macro in spreadsheet
	• msgbox, declaring variables
	• writing a subroutine and function in vba
	• if then statement, case statement
	• for loop, while loop and do until
	• worksheet and range object

READINGS:

1. THE HYPERDOC HANDBOOK: DIGITAL LESSON DESIGN USING GOOGLE APPS by LISA HIGHFILL, KELLY HILTON, SARAH LANDIS, EDUCREATION PUBLISHING
2. GOOGLE DRIVE AND DOCS IN 30 MINUTES by IAN LAMONT, EDUCREATION PUBLISHING

Course Code	DEMG534	Course Title	PREDICTIVE ANALYTICS		
			WEIGHTAGE		
			CA	ETE (Th.)	ETE (Pr.)
			30	40	30

Course Outcomes: Through this course, the student will be able to

CO1: explain the basics of data processing and its implementation by using R programming Language.

CO2: discuss the basics of classification by using Supervised Learning Algorithms.

CO3: use of different Supervised Learning techniques to predict numeric values.

CO4: demonstrate the predictive models by using Neural networks and Support vector machines.

CO5: categorize the data by implementing unsupervised Learning Algorithms.

CO6: illustrate the techniques to evaluate the model performance and various methods to improve it.

Unit No.	Content
Unit-1	Understanding of data: Managing data, Exploring and understanding data, Exploring the structure of data
Unit-2	Data Preprocessing - I: Exploring numeric variables, exploring categorical variables, exploring relationships between variables, Splitting the dataset into the Training set and Test set, Feature Scaling
Unit-3	Data Preprocessing - II: Splitting the dataset into the Training set and Test set, Feature Scaling
Unit-4	Regression - I: Simple Linear Regression Intuition, Simple Linear Regression Implementation
Unit-5	Regression - II: Multiple Linear Regression Intuition, Multiple Linear Regression Implementation, Correlations
Unit-6	Regression - III: Polynomial Linear Regression Intuition, Polynomial Linear Regression Implementation, Decision Tree, random Forest
Unit-7	Evaluation Classification Model Performance: False positive and False Negative, Confusion matrix, CAP Curve
Unit-8	Classification - I: Logistic Regression Intuition, Logistic Regression Implementation, KNN Intuition, KNN implementation
Unit-9	Classification - II: Naïve bayes Intuition, Naïve Bayes Implementation, SVM for classification
Unit-10	Classification - III: Decision Tree for classification, Random Forest for classification
Unit-11	Defining Relationship between Numeric Values: Implementation of Ordinary least squares estimation and Correlation algorithms.
Unit-12	Clustering - I: K-Mean Clustering, K-Mean random initialization trap, Selecting the number of clusters, K-Mean Implementation
Unit-13	Clustering - II: Hierarchal clustering Intuition, Dendrograms, find the right number of clusters, Hierarchal Clustering Implementation
Unit-14	Association Rule learning: Apriori Intuition, Apriori Implementation, Market basket Analysis
Unit-15	Dimensionality reduction: Principal Component Analysis, Linear Discriminant Analysis
Unit-16	Neural Network - I: The neuron, Activation Function, Gradient Descent, Stochastic Gradient Descent, Back-Propagation
Unit-17	Neural Network - II: ANN Intuition, ANN Implementation
Unit-18	Model Selection & Boosting: K- Fold Cross Validation, Grid Search

Unit-19	XGBoost: XGBoost Intuition, XGBoost Implementation
Unit-20	Model Performance Testing: Evaluation Model Performance, Improving Model Performance

READINGS:

1. THE HYPERDOC HANDBOOK: DIGITAL LESSON DESIGN USING GOOGLE APPS by LISA HIGHFILL, KELLY HILTON, SARAH LANDIS, EDUCREATION PUBLISHING
2. GOOGLE DRIVE AND DOCS IN 30 MINUTES by IAN LAMONT, EDUCREATION PUBLISHING

Course Code	DEMKT507	Course Title	WEB AND SOCIAL MEDIA ANALYTICS		
			WEIGHTAGE		
			CA	ETE (Th.)	ETE (Pr.)
			30	0	70

Course Outcomes: Through this course, the student will be able to

CO1: use various Application Programming Interface (API) services to collect data from different social media sources such as YouTube, Twitter etc.

CO2: illustrate processing the collected data using different methods to derive insights about the data.

CO3: analyze unstructured data - primarily textual comments –for sentiments expressed in them.

CO4: use different libraries for collecting, analyzing, and exploring social media data for research and development purposes.

CO5: use the R-markdown language to generate dashboards for presenting data.

CO6: identify the role of social media data and analytics in helping organizations achieve their goals and understand their publics.

Unit No.	Content
Unit-1	Introduction: Social Media Analytics, Web Analytics, Google Analytics
Unit-2	Installation: Use of R for Social Media Analytics, R installation, R/RStudio Setup Guide (on Windows), libraries in R and R studio, Installation of Packages
Unit-3	Collecting and Extracting Social Media Data - I: Collecting Data from Twitter and YouTube, Creating Developer’s Account, exploring libraries for data collection
Unit-4	Collecting and Extracting Social Media Data - II: Twitter data download, Scraping YouTube comments, Web Scraping using rvest
Unit-5	Data Analysis: Social Media Data Analysis with R, Statistical Analysis with R
Unit-6	Visualization, and Exploration: Scripts for converting json to csv, Data Visualization with ggplot2 (R), Statistical Analysis with Twitter Data
Unit-7	Case Studies Social Media Analysis - I: Sentiment Analysis with Twitter Data, Text Mining of Twitter Data,
Unit-8	Case Studies Social Media Analysis - II: YouTube Comments Analysis, Word Clouds in R
Unit-9	Visitor Insights: Understanding Segmentation, Visitors Versus Visitors by Type, extract visitor data
Unit-10	Social media analytics in R - I: segmentation of revenue sources by class of product
Unit-11	Social media analytics in R - II: design an effective marketing campaign, Segmented Email Campaigns, Email open Rates
Unit-12	Web Analytics - I: Web Analytics, Google Analytics
Unit-13	Web Analytics - II: Use of R for Web Analytics, Installing and Setting Up Google Analytics Account,
Unit-14	Web Analytics - III: Google Analytics R Package, performing basic authentication and query in R
Unit-15	Dashboards - I: Creating Dashboards in R, Benefits of Dashboarding
Unit-16	Dashboards - II: Combining Results of Multiple Analyses, Flex dashboards
Unit-17	Dashboards - III: Demonstration of a dashboard generated using flex dashboard in RStudio, Understanding Visitors to a site, how does Google track visitors
Unit-18	Case study Web Analytics - I: Demonstration of building business dashboard in R
Unit-19	Case study Web Analytics - II: Interpretation of business dashboard
Unit-20	Case study Web Analytics - III: recommended actions to improve results

READINGS:

1. SOCIAL MEDIA ANALYTICS: TECHNIQUES AND INSIGHTS FOR EXTRACTING BUSINESS VALUE OUT OF SOCIAL MEDIA by MATTHEW GANIS, AVINASH KOHIRKAR, IBM.COM/ REDBOOKS
2. DATA ANALYTICS WITH R by DR. BHARTI MOTWANI, WILEY SOCIAL MEDIA ANALYTICS: EFFECTIVE TOOLS FOR BUILDING, INTERPRETING, AND USING METRICS by MARSHALL SPONDER, MC GRAW HILL

Course Code	DEFIN530	Course Title	CORPORATE BANKING	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

CO1: analyze different corporate banking operations by Indian commercial banks.

CO2: demonstrate and apply corporate banking principles for managing financial products.

CO3: evaluate critical financial elements in different phases of project financing.

CO4: apply proper financial model for bank lending as per RBI regulations.

Unit No.	Content
Unit 1	Introduction to Banking: Definition, Evolution, and Functions of Banking, Types of Banks: Commercial, Cooperative, Development, and Central Banks, Role of Banks in Economic Development
Unit 2	Structure of the Banking System: Overview of Indian and Global Banking Systems, Organizational Structure of Banks, Regulatory Framework: Role of RBI, Basel Norms
Unit 3	Financial Institutions: Non-Banking Financial Companies (NBFCs), Development Financial Institutions (DFIs), Insurance Companies and Mutual Funds
Unit 4	Banking Products and Services: Deposit Products: Savings, Current, Fixed Deposits, Recurring Deposits, Loan Products: Retail, Corporate, and Priority Sector Lending, Modern Banking Products: Overdrafts, Credit Cards
Unit 5	Central Banking: Role and Functions of Central Banks, Monetary Policy Tools: CRR, SLR, Repo, Reverse Repo, etc., Inflation and Liquidity Management
Unit 6	Financial Markets: Overview of Money and Capital Markets, Instruments: Treasury Bills, Bonds, Equity, Derivatives, Role of Financial Markets in Banking
Unit 7	Risk Management in Banking: Types of Risks: Credit, Market, Operational, and Liquidity Risks, Risk Measurement Tools, Techniques for Risk Mitigation
Unit 8	Banking Technology: Core Banking Solutions (CBS), Digital Banking: Internet Banking, Mobile Banking, and UPI, Cybersecurity in Banking
Unit 9	Retail Banking: Concept and Scope of Retail Banking, Consumer Credit: Personal Loans, Auto Loans, and Housing Loans, Marketing and Customer Relationship Management
Unit 10	Corporate Banking: Features and Functions of Corporate Banking, Working Capital Finance and Term Loans, Trade Finance: Letters of Credit and Bank Guarantees
Unit 11	Financial Services: Wealth Management and Investment Advisory, Insurance Services, Venture Capital and Private Equity
Unit 12	International Banking: Foreign Exchange Markets, Trade Finance and Forex Management, International Banking Regulations and Trends
Unit 13	Banking Regulations and Compliance: Key Banking Acts: Banking Regulation Act, Negotiable Instruments Act, Anti-Money Laundering (AML) and Know Your Customer (KYC), Basel Accords and their Implications
Unit 14	Treasury Management: Role and Functions of a Bank's Treasury, Asset-Liability Management (ALM), Investment Portfolio Management
Unit 15	Credit Management: Principles of Sound Lending, Credit Appraisal and Analysis, Management of Non-Performing Assets (NPAs)
Unit 16	Financial Inclusion: Concept and Importance of Financial Inclusion, Microfinance and SHGs, Government Initiatives: PMJDY, Mudra Loans
Unit 17	Banking Innovations: FinTech and Its Impact on Banking, Blockchain and Cryptocurrency in Banking, Open Banking and API Integration

Unit 18	Ethics and Corporate Governance: Business Ethics in Banking, Corporate Governance Practices in Financial Institutions, Consumer Protection and Grievance Redressal
Unit 19	Banking Sector Reforms: Banking Consolidation and Privatization, Impact of Economic Reforms on Banking, Current Challenges in the Banking Sector
Unit 20	Emerging Trends in Banking and Financial Services: Green Banking and Sustainable Finance, Artificial Intelligence and Machine Learning in Banking, Global Trends: Neobanks and Digital-Only Banks

READINGS:

1. PRINCIPLES AND PRACTICES OF BANKING by INDIAN INSTITUTE OF BANKING AND FINANCE, TAXMANN PUBLISHER
2. BANKERS' HANDBOOK ON CREDIT MANAGEMENT by INDIAN INSTITUTE OF BANKING AND FINANCE, TAXMANN PUBLISHER

Course Code	DEFIN811	Course Title	FINANCIAL STATEMENT ANALYSIS AND CREDIT MANAGEMENT
			WEIGHTAGE
			CA ETE (Th.)
			30 70

Course Outcomes: Through this course, the student will be able to

CO1: illustrate the various macroeconomic factors and their implications for economic growth.

CO2: analyze the position through financial statements and the practices of financial reporting.

CO3: demonstrate the use of financial management techniques for performance evaluation and credit appraisal.

CO4: devise credit rating mechanism for banking and non-banking financial institutions.

Unit No.	Content
Unit 1	Introduction to Financial Statement Analysis: Purpose and importance of financial statement analysis, Key users of financial statements, Overview of financial statements: balance sheet, income statement, and cash flow statement
Unit 2	Accounting Principles and Standards: GAAP vs. IFRS, Role of accounting standards in financial reporting, Common adjustments to financial statements for analysis purposes
Unit 3	The Balance Sheet: Structure and components of the balance sheet, Assets: current and non-current, Liabilities: current and long-term, Equity: retained earnings and shareholders' equity
Unit 4	The Income Statement: Revenue recognition principles, Expense categories and cost of goods sold (COGS), Profitability metrics: gross, operating, and net income
Unit 5	The Cash Flow Statement: Structure and categories (operating, investing, financing), Importance of cash flows in credit analysis, Reconciling cash flow with the income statement and balance sheet
Unit 6	Ratio Analysis Basics: Types of ratios: liquidity, solvency, profitability, and efficiency, Interpretation and benchmarking, Common pitfalls in ratio analysis
Unit 7	Liquidity Analysis: Key liquidity ratios: current ratio, quick ratio, and cash ratio, Importance in short-term credit evaluation, Case studies on liquidity stress testing
Unit 8	Solvency Analysis: Leverage ratios: debt-to-equity, interest coverage, and debt-to-assets, Assessing long-term financial stability, Credit risk implications of solvency
Unit 9	Profitability Analysis: Margin ratios: gross, operating, and net profit margins, Return on equity (ROE) and return on assets (ROA), Impact of capital structure on profitability
Unit 10	Efficiency and Turnover Analysis: Asset turnover ratios: inventory, receivables, and fixed assets, Operating cycle and cash conversion cycle, Enhancing operational efficiency
Unit 11	DuPont Analysis: Breakdown of ROE using the DuPont framework, Interaction between profitability, efficiency, and leverage, Practical applications in performance evaluation
Unit 12	Industry and Comparative Analysis: Importance of industry-specific benchmarks, Peer group analysis, Challenges in cross-industry comparisons
Unit 13	Credit Risk Assessment: Components of credit risk: probability of default and loss given default, Credit scoring models and metrics, Qualitative factors in credit evaluation
Unit 14	Financial Forecasting and Projections: Building pro forma financial statements, Sensitivity and scenario analysis, Application in credit decision-making
Unit 15	Bankruptcy Prediction Models: Altman Z-score model, other bankruptcy prediction models, Early warning signs of financial distress
Unit 16	Non-Financial Factors in Credit Analysis: Management quality and corporate governance, Industry trends and macroeconomic factors, Environmental, social, and governance (ESG) considerations
Unit 17	Credit Documentation and Covenants: Components of credit agreements, Importance of financial covenants, Monitoring compliance with loan terms
Unit 18	Case Studies in Financial Statement Analysis: Real-world financial statements, Analysis of successful and failed companies, Lessons from financial scandals

Unit 19	Tools and Software for Financial Analysis: Introduction to Excel for financial modelling, Overview of tools like Bloomberg Terminal, S&P Capital IQ, and others, Leveraging automation and AI in financial analysis
Unit 20	Credit administration: Reviewing internal credit policy, Business impact of enhancing reduction in credit period allowed, Limits and renewals of contracts

READINGS:

1. CREDIT RISK MANAGEMENT FOR INDIAN BANKS by VAIDYANATHAN, SAGE PUBLICATIONS
2. MANAGEMENT ACCOUNTING by KHAN M Y AND JAIN P K, MCGRAW HILL EDUCATION
3. FINANCIAL ACCOUNTING FOR MANAGEMENT by SHAH PARESH, OXFORD UNIVERSITY PRESS

Course Code	DEFIN528	Course Title	MANAGEMENT OF FINANCIAL SERVICES	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

CO1: assess the role of financial services in enabling the flow of capital and economy policy.

CO2: analyze the different sources to raise the capital in recent global environment.

CO3: analyze the different pricing problems related to capital issues, venture capital financing.

CO4: apply and create different financial products based on current regulatory mechanism.

Unit No.	Content
Unit 1	Introduction to Financial Services: Definition and scope of financial services, Types of financial services: banking, insurance, investment, and advisory, Importance of financial services in the economy
Unit 2	The Financial Services Environment: Key participants: banks, NBFCs, mutual funds, and insurance companies, Overview of financial markets: money markets, capital markets, and forex markets, Impact of macroeconomic factors on financial services
Unit 3	Regulatory Framework for Financial Services: Role of regulatory bodies: SEC, RBI, SEBI, and others, Key regulations governing financial services, Compliance requirements and their implications
Unit 4	Risk Management in Financial Services: Types of risks: credit, market, operational, and liquidity, Risk management tools and techniques, Role of technology in risk mitigation
Unit 5	Banking Services Management: Retail and corporate banking services, Key banking products: loans, deposits, and payment systems, Role of digital banking in service delivery
Unit 6	Insurance Services Management: Types of insurance: life, health, property, and casualty, Principles of risk pooling and underwriting, Emerging trends: insurtech and customized insurance products
Unit 7	Investment Services: Portfolio management and advisory services, Role of mutual funds and hedge funds, Importance of ethical practices in investment advisory
Unit 8	Asset Management Services: Principles of asset allocation and diversification, Managing institutional and individual portfolios, Performance measurement and reporting
Unit 9	Wealth Management: Understanding client needs and risk profiles, Wealth preservation and growth strategies, Estate planning and tax optimization
Unit 10	Financial Advisory Services: Role of financial advisors in personal finance management, Structuring financial plans for clients, Tools for financial planning and simulation
Unit 11	Credit Services Management: Role of credit bureaus and credit scoring, Principles of lending and loan structuring, non-performing assets (NPAs) and recovery strategies
Unit 12	Payment and Settlement Systems: Overview of payment systems: RTGS, NEFT, UPI, and SWIFT, Digital wallets and mobile banking services, Security and fraud prevention in payment systems
Unit 13	Marketing of Financial Services: Strategies for promoting financial products and services, Customer relationship management (CRM) in financial services, Digital marketing in the financial sector

Unit 14	Technology in Financial Services: Role of FinTech in transforming financial services, Blockchain, AI, and big data in financial management, Cybersecurity challenges and solutions
Unit 15	Ethical Issues in Financial Services: Importance of ethical practices and transparency, Addressing conflicts of interest, Case studies on ethical lapses in financial services
Unit 16	International Financial Services: Cross-border financial services and regulations, Role of international financial institutions (IMF, World Bank), Trends in global financial integration
Unit 17	Mergers, Acquisitions, and Consolidation in Financial Services: Drivers of M&A in the financial sector, Valuation and integration challenges, Case studies on successful and failed consolidations
Unit 18	Emerging Trends in Financial Services: ESG-focused financial products, Peer-to-peer lending and crowdfunding, Role of sustainability in financial services
Unit 19	Crisis Management in Financial Services: Managing financial crises and their impact on services, Case studies of past financial crises (e.g., 2008 global financial crisis), Role of central banks and governments in crisis mitigation
Unit 20	Contemporary Issue: Comprehensive analysis of a financial services firm, Designing an innovative financial product or service, Presentation and feedback session

READINGS:

1. FINANCIAL SERVICES by THUMMULURI SIDDAIAH, PEARSON
2. MANAGEMENT OF BANKING AND FINANCIAL SERVICES by SURESH PADMALATHA AND PAUL JUSTIN, PEARSON

Course Code	DEOPR513	Course Title	INVENTORY MANAGEMENT	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

C01: understand the fundamental concepts, objectives, and importance of inventory management in modern business operations.

C02: apply inventory control techniques such as EOQ (Economic Order Quantity), ABC analysis, and safety stock calculations to optimize inventory levels.

C03: evaluate inventory performance using key metrics and implement strategies for reducing inventory costs while maintaining service levels.

C04: analyze the impact of technology, demand forecasting, and supply chain integration on inventory management practices.

Unit No.	Content
Unit 1	Fundamentals of Inventory Management: overview, demand forecasting, safety stock, order optimization, inventory classification, technology in tracking, case study
Unit 2	Aggregate Planning and Master Scheduling: strategies for uneven demand, aggregate planning techniques, master scheduling, workforce management, demand management in service industries
Unit 3	Inventory Costs and Valuation: JIT inventory, costs of holding inventory, stockout, inventory valuation methods, shrinkage, activity-based costing, case study
Unit 4	Material Requirements Planning (MRP) and ERP: MRP inputs and benefits, MRPII, capacity planning, ERP systems, cloud-based ERP solutions
Unit 5	Inventory Optimization and Performance Measurement: turnover, fill rate, cost analysis, performance metrics, inventory benchmarking, reduction strategies, case studies
Unit 6	Inventory Management Systems and Tools: overview of systems and tools, e-commerce, AI, blockchain, mobile solutions, case study
Unit 7	Supply Chain Integration: importance, CPFR, VMI, bullwhip effect reduction, digital supply networks
Unit 8	Forecasting in Inventory Management: demand forecasting methods, quantitative and qualitative models, predictive analytics, managing forecast errors
Unit 9	Inventory Management in Manufacturing: role of inventory, lean practices, Kanban, TPM, smart manufacturing for optimization
Unit 10	Risk Management in Inventory: identifying risks, mitigating stockouts and overstocking, scenario planning, hedging, real-time monitoring
Unit 11	Sustainability in Inventory Management: green inventory, sustainable packaging, circular economy, carbon footprint of inventory
Unit 12	Warehouse and Storage Management: layout design, efficient storage, ASRS, virtual warehousing, WMS
Unit 13	Inventory and Logistics: inventory role, optimization, cross-docking, outsourcing, reverse logistics
Unit 14	Service Industry Inventory Management: characteristics, challenges in healthcare, hospitality, utilities, just-in-case strategies

Unit 15	Technology Trends in Inventory Management: IoT, big data, digital twins, RPA, edge computing in inventory
Unit 16	Ethical and Legal Aspects of Inventory Management: compliance, ethical issues, anti-counterfeit, labor laws
Unit 17	Multi-Echelon Inventory Management: managing inventory across locations, distribution network optimization, pooling, rebalancing, simulation modeling
Unit 18	Inventory Budgeting and Financial Planning: budget allocation, working capital, trade credit, ROI of inventory investments
Unit 19	Inventory Auditing: auditing methods, internal and external audits, forensic auditing, omnichannel environments
Unit 20	Advanced Topics in Inventory Management: future trends, emerging challenges and opportunities, digital transformation with AI and autonomous systems

READINGS:

1. INTRODUCTION TO MATERIALS MANAGEMENT (8TH EDITION) by ARNOLD, J. R. T., CHAPMAN, S. N., & CLIVE, L. M. (2018), PEARSON.
2. MANUFACTURING PLANNING AND CONTROL FOR SUPPLY CHAIN MANAGEMENT by VOLLMANN, T. E., BERRY, W. L., WHYBARK, D. C., & JACOBS, F. R. (2005), MCGRAW-HILL.
3. SUPPLY CHAIN MANAGEMENT: STRATEGY, PLANNING, AND OPERATION (8TH EDITION) by CHOPRA, S., & MEINDL, P. (2021), PEARSON.
4. BUSINESS LOGISTICS/SUPPLY CHAIN MANAGEMENT by BALLOU, R. H. (2003), PEARSON.

Course Code	DEOPR536	Course Title	Global Supply Chain	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

- C01:** recall and describe the key concepts and principles of global supply chain management, including strategic planning, and alignment with business strategy.
- C02:** understand and explain the various aspects of logistics and transportation within a global supply chain, including transportation modes, network design, warehouse management, and inventory positioning strategies.
- C03:** apply and demonstrate the concepts of collaboration and coordination in global supply chain management, including vendor-managed inventory and collaborative transportation management.
- C04:** analyze and evaluate global trade operations' regulatory framework and practices, including international trade overview and INCOTERMS.
- C05:** evaluate and devise strategies for mitigating risks in global supply chains, including developing risk mitigation approaches.
- C06:** design effective processes and procedures within the organization for export-import management to meet customs regulations and manage risk.

Unit No.	Content
Unit 1	Overview and Scope of Global Supply Chain Management: definition, components, globalization drivers, importance in modern business
Unit 2	Developing a Global Supply Chain Strategy: strategy framework, balancing cost, quality, delivery time, case studies
Unit 3	Aligning Supply Chain Strategy with Business Strategy: importance of alignment, KPIs, tools for alignment
Unit 4	Risk Management in Global Supply Chain Management: types of risks, risk identification frameworks, case studies
Unit 5	Sustainable Supply Chain Management: sustainability principles, tools (e.g., carbon footprint analysis), regulatory frameworks
Unit 6	Transportation Modes and Their Selection: characteristics of air, sea, rail, road, cost-benefit analysis, real-world examples
Unit 7	Global Logistics Network Design and Optimization: network design factors, technologies for optimization (e.g., TMS, IoT), case studies
Unit 8	Strategic Warehouse Management in Global Supply Chain Management: warehouse roles, automation and robotics, best practices
Unit 9	Inventory Positioning Strategies and Management in Global Supply Chains: centralization vs. decentralization, optimization models, safety stock role
Unit 10	Collaborative Transportation Management (CTM): concept, benefits, role of technology, collaborative case studies

Unit 11	Information Sharing in Global Supply Chain Management: real-time data exchange, tools (e.g., blockchain), barriers to sharing
Unit 12	Vendor-Managed Inventory (VMI): process flow, benefits, implementation challenges, successful VMI case studies
Unit 13	Emerging Trends in Global Supply Chain Management: digital transformation, AI & ML in demand forecasting, circular supply chains
Unit 14	Overview of International Trade: role of trade agreements, impact of trade policies, cross-border trade challenges
Unit 15	Regulatory Framework for International Trade: key regulations, customs and export control, country-specific trade regulations
Unit 16	INCOTERMS, Documentation, and Compliance in International Trade: explanation of INCOTERMS, importance of trade documentation, compliance challenges
Unit 17	Payment and Financing in International Trade: modes of payment, role of trade finance instruments, managing exchange rate risks
Unit 18	Strategies and Approaches to Mitigate Global Supply Chain Risks: identifying vulnerabilities, proactive vs. reactive strategies, insurance role
Unit 19	Building Resilience in Global Supply Chain Management: contingency planning, diversification, case studies on resilient supply chains
Unit 20	Export and Import Management Processes: steps in export-import cycle, role of technology (e.g., EDI systems), risk management and customs compliance

READINGS:

1. SAFEDUCATE STUDY MATERIAL by SAFEDUCATE STUDY MATERIAL, N A
2. STUDY MATERIAL by INDUSTRY PARTNER (SEEKHO) by STUDY MATERIAL by INDUSTRY PARTNER (SEEKHO), N A

Course Code	DEOPR524	Course Title	Logistics Management	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to
CO1: evaluate logistics and transportation to ensure efficient supply chain management.
CO2: estimate various costs involved in logistics operations.
CO3: interpret processes to maintain, compile, store, and retrieve data and information related to logistics management.
CO4: appraise maritime transport and intermodal equipment.

Unit No.	Content
Unit 1	Fundamentals of Logistics Management: definition, scope, logistics and supply chain integration, customer service, sales-service relationship, supplier relationships
Unit 2	Freight Transportation Systems: road freight overview, vehicle selection, load types, air freight hubs, pricing, cargo security
Unit 3	Maritime and Intermodal Transportation: vessel classification, cargo handling, intermodal equipment, challenges, innovations
Unit 4	Transportation Network Analysis: network design, optimization techniques, case studies, technology's role in analysis
Unit 5	Logistics Operations Management: material handling, order picking, warehouse operations, trends in automation
Unit 6	Role of IT in Logistics Management: technology impact, automatic identification, material handling systems, warehouse simulation
Unit 7	Inventory and Storage Management: inventory control principles, stock replenishment, storage systems, cold chain logistics
Unit 8	Reverse Logistics and Returns Management: significance, challenges, sustainable practices, effective case studies
Unit 9	Risk Management in Logistics: risk identification, mitigation strategies, disaster recovery planning, geopolitical factors
Unit 10	Green Logistics and Sustainability: sustainable practices, reducing carbon footprint, green warehousing, regulatory frameworks
Unit 11	E-commerce and Last-Mile Delivery: challenges, innovations, omnichannel strategies, customer experience in last-mile logistics
Unit 12	Cost Management in Logistics: components of logistics costs, cost reduction, activity-based costing, optimization of budgets

Unit 13	Global Logistics Management: challenges, trade agreements, cross-border logistics, global logistics case studies
Unit 14	Logistics Performance Metrics: measuring performance, KPIs, benchmarking, improving efficiency
Unit 15	Emerging Trends in Logistics: AI and big data, blockchain, digital twins, predictive analytics, automation trends
Unit 16	Collaboration in Logistics Networks: vendor and supplier collaboration, collaborative transportation management, shared logistics services
Unit 17	Maritime Logistics Innovations: technological advancements, port automation, digitalization, sustainability in maritime logistics
Unit 18	Urban Logistics and Challenges: managing urban logistics, traffic and delivery efficiency, micro-fulfillment centers, innovations
Unit 19	Crisis Management in Logistics: managing logistics during emergencies, pandemics impact, building resilient systems, case studies
Unit 20	Capstone Project and Real-World Applications: designing logistics systems, applying concepts, presentations, peer evaluations, course wrap-up

READINGS:

1. BUSINESS LOGISTICS/SUPPLY CHAIN MANAGEMENT by RONALD H. BALLOU AND SAMIR K. SRIVASTAVA, PEARSON
2. LOGISTICS MANAGEMENT by VINOD V SOPLE, PEARSON

Course code	DEHLT501	Course Title	HEALTHCARE DELIVERY SYSTEMS AND PUBLIC HEALTH ADMINISTRATION
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

C01: analyze the healthcare delivery systems, issues and challenges in relations to policies implementation and, evaluate the health care costs and health care financing.

C02: apply the analytical and critical thinking abilities for Performance assessment and process improvement of healthcare organizations.

C03: review the technologies and methodologies of data-based decision making tools used for healthcare delivery systems.

C04: evaluate the design and management control systems impact of healthcare delivery systems.

C05: develop implement and manage various public health programs administrations.

Unit No.	Content
Unit 1	Introduction to Healthcare Delivery Systems: Overview of healthcare systems, roles and challenges, governance in healthcare, policy and planning, and healthcare delivery models
Unit 2	Health Information Management and Financing: Health informatics systems, financing mechanisms in healthcare, cost containment strategies, and financial sustainability in healthcare systems
Unit 3	Performance Assessment in Healthcare: Approaches for performance assessment, patient safety indicators, proactive risk assessment, and methodologies for evaluating healthcare quality
Unit 4	Process Improvement Management: Principles of lean in healthcare, Kaizen methodology, Six Sigma for process optimization, and continuous improvement strategies
Unit 5	Alternative Models of Healthcare Delivery: Integrated models of healthcare delivery, primary and preventive care models, community-based healthcare delivery systems
Unit 6	System Engineering in Healthcare: Basics of systems engineering, healthcare system modeling, application of engineering principles in healthcare optimization
Unit 7	Technologies in Healthcare Delivery: Emerging technologies such as AI, IoT, telemedicine, and their applications in enhancing healthcare services
Unit 8	Queueing Theory and Modeling in Healthcare: Queueing systems for managing patient flow, reducing waiting times, and improving service delivery in healthcare settings
Unit 9	Markov Decision Processes: Concepts of Markov models, applications in healthcare decision-making, resource allocation, and cost-effectiveness analysis
Unit 10	Healthcare Design and Planning: Principles of designing healthcare facilities, planning preventive and emergency care, and optimizing resource allocation
Unit 11	Control and Management of Healthcare Systems: Strategies for controlling healthcare systems, operational management, and the role of leadership in healthcare organizations
Unit 12	Preventive Care and Telemedicine: Preventive healthcare services, health promotion programs, and implementation of telemedicine for remote healthcare delivery
Unit 13	Pharmacy and Laboratory Operations in Healthcare: Management of pharmacy operations, quality control in clinical laboratories, and regulatory compliance
Unit 14	Emergency and Pandemic Response Planning: Planning for healthcare

	emergencies, disaster preparedness, pandemic response strategies, and collaboration with public health agencies
Unit 15	Public Health Administration Framework: Roles of public health administration, policy frameworks, governance models, and integration with healthcare services
Unit 16	Data Acquisition in Public Health: Methods of data collection, data analytics in public health, and the use of digital tools for epidemiological studies
Unit 17	Use of Information Systems in Public Health: Applications of Health Information Systems (HIS), electronic health records (EHR), and data-driven decision-making
Unit 18	Provision of Primary Healthcare Services: Strategies for delivering primary healthcare, assessment of patient pathways, and community engagement in healthcare delivery
Unit 19	Evaluation of Public Health Programs: Methods for evaluating public health programs, impact assessment, cost-effectiveness analysis, and policy recommendations
Unit 20	Future Directions in Healthcare Systems: Innovations in healthcare delivery, advancements in AI and automation, predictive healthcare models, and sustainable healthcare practices

READINGS:

1. HANDBOOK OF HEALTHCARE DELIVERY SYSTEMS by YEUHWERN YIH, CRC PRESS
2. HEALTH CARE ADMINISTRATION: MANAGING ORGANIZED DELIVERY SYSTEMS by LAWRENCE F. WOLPER, JONES & BARTLETT LEARNING
3. HEALTHCARE MANAGEMENT AND ADMINISTRATION by S. L. GOEL, DEEP & DEEP PUBLICATIONS PVT. LTD

Course code	DEHLT502	Course Title	MEDICAL TERMINOLOGY AND MEDICAL RECORDS
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to

C01: apply medical terminology effectively in transcribing patient conditions in clinical practice.

C02: evaluate patient records for accurate biological term usage during audits.

C03: analyze clinical scenarios to ensure accurate medical terminology usage.

C04: design policy matters on biomedical instrumentation for its maintenance and utility.

C05: apply best practices in medical record-keeping for accurate filing and management.

C06: create a framework for integrating telemedicine and emerging health technologies into medical records.

Unit No.	Content
Unit 1	Introduction to Medical Terminology: Purpose and importance of medical terminology, formation of medical terms (prefixes, suffixes, roots, and combining forms), terms of signs and symptoms in medical terminology
Unit 2	Medical Investigations and Diagnosis: Terminology related to diagnostic investigations (X-rays, MRI, CT scans), terms used in prognosis and treatment, common diseases and conditions (infections, fractures, diabetes), overview of drugs (antibiotics, pain relievers, antidiabetics)
Unit 3	Medical Terms Associated with the Nervous System: Overview of the nervous system (brain, spinal cord, and nerves), common diseases and conditions (epilepsy, Parkinson's, Alzheimer's, migraines), related drugs (antiepileptics, painkillers, sedatives)
Unit 4	Medical Terms Associated with Circulatory and Respiratory Systems: Overview of the circulatory system (heart, blood vessels) and respiratory system (lungs, airways), diseases (hypertension, heart attack, stroke, asthma, bronchitis, COPD, pneumonia), related drugs (antihypertensives, anticoagulants, bronchodilators, inhaled corticosteroids, antibiotics)
Unit 5	Medical Terms Associated with the Digestive and Urinary Systems: Overview of the digestive system (stomach, intestines, liver) and urinary system (kidneys, bladder), diseases (GERD, ulcers, hepatitis, UTI, kidney stones, chronic kidney disease), related drugs (antacids, laxatives, diuretics, antibiotics, proton pump inhibitors)
Unit 6	Medical Terms Associated with the Musculoskeletal System: Overview of the musculoskeletal system (bones, joints, muscles), diseases (osteoporosis, arthritis, muscular dystrophy), related drugs (NSAIDs, muscle relaxants, calcium supplements)
Unit 7	Medical Terms Associated with Reproductive and Endocrine Systems: Reproductive system (male and female anatomy) and endocrine system (glands and hormones), diseases (PCOS, infertility, sexually transmitted infections, diabetes, hypothyroidism, adrenal insufficiency), related drugs (contraceptives, hormone therapy, insulin, thyroid hormones, corticosteroids)
Unit 8	Medical Terms Associated with Blood and Immunity: Overview of blood (composition and functions) and immune systems (antibodies, immune response), diseases (anaemia, leukaemia, autoimmune disorders), related drugs (immunosuppressants, anticoagulants, iron supplements)
Unit 9	Medical Terms Associated with Sense Organs: Overview of sense organs (eyes, ears, skin, nose, tongue), diseases (cataracts, glaucoma, otitis media, eczema), related drugs (antihistamines, antibiotics for ophthalmic/optic use, steroid creams)

Unit 10	Biomedical Monitoring Systems: Introduction to biomedical instrumentation, monitoring systems (ECG, blood pressure, pulse oximeter), diagnostic imaging (ultrasound)
Unit 11	Portable and Laboratory Equipment: Syringe pumps, centrifuge, analysers, laboratory equipment used in healthcare
Unit 12	Life Support and Therapeutic Equipment: Defibrillators, ventilators, infant warmers, therapeutic equipment (ultrasound therapy, sterilizers)
Unit 13	Operating Room Equipment: Overview of operating room equipment, including boilers, warmers, and sterilizers
Unit 14	Introduction to Medical Records: Concept and purpose of medical records, types of medical records, organization of medical record forms
Unit 15	Filing and Storage of Medical Records: Filing systems, storage of medical records, workflow of medical records in healthcare facilities
Unit 16	Medicolegal Aspects of Medical Records: Confidentiality of medical records, legal aspects and policies, guidelines for medical record management
Unit 17	Emerging Trends in Medical Records: Electronic health records (EHR), E-health and M-health, applications in modern healthcare
Unit 18	SOAP Technique and Transcription: SOAP (Subjective, Objective, Assessment, Plan) technique, medical transcription processes and standards
Unit 19	Risks and Challenges in Medical Records: Confidentiality risks, challenges in maintaining accuracy, compliance with regulations
Unit 20	Telemedicine and Emerging Technologies: Overview of telemedicine, applications in healthcare, future trends in medical record science (AI and automation)

READINGS:

1. MEDICAL INSTRUMENTATION AN INDIAN ADAPTATION APPLICATION AND DESIGN 5TH EDITION 2021 AT MERIPUSTAK MEDICAL INSTRUMENTATION AN INDIAN ADAPTATION APPLICATION AND DESIGN by JOHN G. WEBSTER AND AMIT J. NIMUNKAR, WILEY
2. MEDICAL TERMINOLOGY: AN ILLUSTRATED GUIDE by BARBARA JANSON COHEN, LIPPINCOTT WILLIAMS & WILKINS, LIPPINCOTT WILLIAMS & WILKINS
3. MEDICAL TERMINOLOGY, ILLUSTRATED GUIDE by BARBARA JANSON COHEN, ANN DEPETRIS, WILEY

Course code	DEHLT607	Course Title	QUALITY ASSURANCE IN HEALTHCARE
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WEIGHTAGES	
CA	ETE(Th.)
30	70

Course Outcomes: Through this course, the student will be able to
 CO1: describe the principles of quality management in healthcare facility.
 CO2: demonstrate various quality indicators and benchmarks in healthcare settings.
 CO3: analyze the process of quality healthcare implementation in India.
 CO4: intervene the current system and scope of service of healthcare organization.
 CO5: outline the practical implementation in healthcare facilities.
 CO6: interpret the improvement of services in hospital industry.

Unit No.	Content
Unit 1	Quality in Healthcare: Dimensions of quality in healthcare, International Society for Quality in Healthcare (ISQua), Quality Council of India (QCI)
Unit 2	Essentials of Quality Improvement: Essentials of quality improvement in healthcare services, implementation of quality management programs in organizations, improvement of quality in healthcare, quality manual
Unit 3	Accreditation Bodies: Types of accreditation bodies, NABH, NABL, Joint Commission International (JCI), scopes including Blood Bank/Storage Centres, PHC/CHC, AYUSH centres, wellness centre
Unit 4	NABH Implementation Guidelines: Broad guidelines of NABH implementation and its levels, SOP (Standard Operating Procedure), committee formation and its functioning, self-assessment toolkit and its measurement
Unit 5	Quality Management Frameworks: The Juran Trilogy, Total Quality Management (TQM) principles and techniques, PDSA (Plan-Do-Study-Act) cycle, Kaizen, Philip Crosby's principles
Unit 6	Benchmarking and Lean Thinking: Benchmarking in quality management, Quality insurance and quality control, 5S principles, Lean Thinking, Six Sigma Process
Unit 7	Analytical Tools in Quality Management: Pareto Analysis, FMEA (Failure Mode and Effects Analysis), Fish Bone Analysis, Root cause analysis (RCA), Corrective and preventive actions (CAPA)
Unit 8	NABH Approaches for Patient-Centered Care: Understanding patient-centered approaches in NABH, Access, Assessment, and Continuity of Care (AAC), Care of Patients (COP), Management of Medication (MOM)
Unit 9	NABH Approaches for Organization-Centered Care: Hospital Infection Control (HIC), Patient Rights and Education (PRE), Continuous Quality Improvement (CQI), Responsibilities of Management (ROM)
Unit 10	Facility and Safety Management: Facility Management and Safety (FMS), Human Resource Management (HRM), Information Management System (IMS)
Unit 11	Quality Function Deployment in Hospitals: Introduction to Quality Function Deployment (QFD), statutory compliance in hospitals, patient safety management programs
Unit 12	Infection Control Programs: Infection control programs in hospitals, tools and strategies for effective infection control

Unit 13	Quality Manual and Its Application: Development of a quality manual, Policies, manuals and SOP, application of quality manuals in healthcare organizations
Unit 14	Accreditation and Certification Processes: Overview of accreditation and certification processes, role of NABH and NABL in quality improvement
Unit 15	Total Quality Management (TQM) Techniques: Advanced TQM techniques, integration of TQM in healthcare services
Unit 16	Lean and Six Sigma in Healthcare: Application of Lean principles in hospital management, Six Sigma methodology for process improvement
Unit 17	Tools for Quality Monitoring: Fishbone Diagram (Cause-Effect Analysis), Pareto Analysis, Root Cause Analysis (RCA)
Unit 18	Evaluation of Quality Management Systems (QMS): Evaluation of QMS in healthcare, medical audits, Clinical audit, continuous monitoring, and improvement strategies
Unit 19	Challenges in Implementing Quality Standards: Challenges faced in implementing quality standards in healthcare, addressing resistance to change, staff training, and resource allocation
Unit 20	Emerging Trends in Quality Management: Emerging trends in healthcare quality management, integration of technology, AI in quality monitoring, future scope of quality improvement

READINGS:

1. QUALITY MANAGEMENT IN HOSPITALS by JOSHI SK, JAYPEE BROTHERS MEDICAL PUBLISHERS PVT. LTD.
2. TOTAL QUALITY MANAGEMENT by BESTERFIELD, PEARSON
3. QUALITY MANAGEMENT PAPERBACK by KANISHKA BEDI, OXFORD UNIVERSITY PRESS
4. TOTAL QUALITY MANAGEMENT PRINCIPLES, PRACTICE AND CASES by D.D. SHARMA, SULTAN CHAND & SONS (P) LTD

Course code	DEPEA515	Course Title	ANALYTICAL SKILLS-I	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

CO1: apply the procedural fluency with number system and mathematical operations to solve the stated problems.

CO2: apply an appropriate approach to solve problems related to percentage and profit & loss.

CO3: analyze the reasoning aptitude problems such as blood relation, direction sense and number ranking & time sequence test to solve related problems.

CO4: apply the analytical concepts learnt to solve the questions of ratio & proportion and alligation & mixture.

CO5: use the concepts of permutation & combination and probability to solve related problems.

CO6: apply the concepts learnt to solve the questions related to syllogisms and data interpretation.

Unit No.	Content
Unit 1	Number system: classification of numbers, rules of divisibility, multiplication and squaring of numbers, HCF & LCM of numbers, cyclicity of unit digit, remainder theorem
Unit 2	Average: average of numbers, arithmetic mean, weighted average
Unit 3	Mathematical operations: BODMAS rule, calculation based problem, conversion of symbols into signs
Unit 4	Percentage: commodity price increase/decrease, comparison based questions, population based examples, successive percent changes, budget based problems
Unit 5	Profit and loss: cost price, selling price, profit and loss, calculation of profit/loss percent, false weight, discount, successive discount, marked price
Unit 6	Direction sense test: understanding of directions, different types of practice problems
Unit 7	Blood relation: cracking jumbled up descriptions, relation puzzle, coded relations
Unit 8	Number, ranking and time sequence: number test, ranking test, time sequence test
Unit 9	Ratio and proportion: ratio and its types, proportion and its types, direct and indirect variations, partnership
Unit 10	Alligation or mixture: concept and rules of alligation, problem based on mixing of liquids/items
Unit 11	Problem on ages and numbers: problems on ages, problem on numbers
Unit 12	Permutation and combination: factorial, difference between permutation & combinations, circular permutation, arrangement and selection based problems, distribution and division Probability: experiment, sample space, event, probability of occurrence of an event, bayes theorem, odds of an event, selection based problems, binomial distribution

Unit 13	Logical Venn diagram and set theory: Venn diagram based problems, concept of set theory Syllogism: all, some and none relations, related statements with Venn diagram
Unit 14	Data interpretation: basics of data interpretation, average and percentage, tabulation, bar graphs, pie charts, line graphs

READINGS:

1. QUANTITATIVE APTITUDE FOR COMPETITIVE EXAMINATIONS by Dr. R S AGGARWAL, S CHAND PUBLISHING
2. A MODERN APPROACH TO VERBAL & NON-VERBAL REASONING by Dr. R S AGGARWAL, S CHAND PUBLISHING
3. MAGICAL BOOK ON QUICKER MATHS by M TYRA, BANKING SERVICE CHRONICLE
4. ANALYTICAL REASONING by M.K. PANDEY, BANKING SERVICE CHRONICLE

Course code	DEPEA516	Course Title	ANALYTICAL SKILLS-II	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

CO1: employ the concepts learnt to analyze and solve the problems related to work based on time and efficiency.

CO2: use an appropriate approach to solve problems related to time, speed and distance.

CO3: analyze the various logical reasoning techniques to solve problems related to series completion, coding decoding in minimum possible time.

CO4: utilize analytical skills to calculate simple and compound interest.

CO5: articulate an appropriate approach to solve the problems related to clock and calendar.

CO6: analyze the logical reasoning aptitude problems related to puzzle test and non-verbal reasoning to solve accordingly.

Unit No.	Content
Unit 1	Time and Work: chain rule, computation of work done together, men, women, children-based problems, wages-based work problems, alternate day work
Unit 2	Pipes and Cisterns: inlet-outlet, part of tank filled, time-based problems, alternate work
Unit 3	Time and Distance: concept of time speed and distance, conversion of Units, average speed concept, different types of problems
Unit 4	Problem on trains: relative speed concept, faster and slower train Boats and streams and races: downstream and upstream, linear and circular track
Unit 5	Sequence and series completion: series completion, analogy, classification, arithmetic and geometric progression
Unit 6	Alphabet test and logical sequence of words: alphabetical order of words, letter-word problems, rule detection, alphabetical quibble, word formation by unscrambling letters, word formation using Letters of a given word, alpha-numeric sequence puzzle, logical sequence of words
Unit 7	Coding-Decoding: letter coding, number/symbol coding, substitution, matrix coding, mixed letter coding, mixed number coding
Unit 8	Simple interest: basics of principal, rate and time, rate computation, time computation, amount computation
Unit 9	Compound interest: concept of simple and compound interest, questions based on relation between compound and simple interest
Unit 10	Calendar: calculating odd days, basic concept of calendar, finding the exact day
Unit 11	Clocks: concept of clock, angle computation, loss or gain in time
Unit 12	Data sufficiency: reasoning and quantitative data sufficiency problems Coding inequalities: basic operations, rules of inequalities, coded relations
Unit 13	Puzzle test: seating/placing arrangements, comparison type questions, sequential order of things, family-based problems
Unit 14	Non-Verbal Reasoning: series of figures, analogy of figures, classification of figures

READINGS:

1. QUANTITATIVE APTITUDE FOR COMPETITIVE EXAMINATIONS by DR. R S AGGARWAL, S CHAND PUBLISHING
2. A MODERN APPROACH TO VERBAL & NON-VERBAL REASONING by DR. R S AGGARWAL, S CHAND PUBLISHING
3. MAGICAL BOOK ON QUICKER MATHS by M TYRA, BANKING SERVICE CHRONICLE
4. ANALYTICAL REASONING by M.K. PANDEY, BANKING SERVICE CHRONICLE

Course code	DEENG539	Course Title	ACADEMIC ENGLISH	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

C01: differentiate between a range of authentic academic texts.

C02: observe actively to lectures, presentations and interviews to understand key information.

C03: construct a variety of essays and other assignments.

C04: appraise academic grammar.

C05: apply academic English and vocabulary in professional life.

Unit No.	Content
Unit 1	Academic writing: introduction, texts and academic texts, ways of writing, balanced versus weighted essays
Unit 2	Academic writing: brainstorming and outlining, gathering information
Unit 3	Writing paragraphs: introduction, types of paragraphs, enumeration
Unit 4	Writing paragraphs: exemplification, complex paragraphs, sequence
Unit 5	Writing paragraphs: comparison of items, cause effect in paragraph writing, visuals in paragraph writing
Unit 6	Basics of reports and research papers: introduction, types of reports, format of a report, assessment reports
Unit 7	Basics of reports and research papers: writing a report, understanding the text, data collection, writing a research paper
Unit 8	Basics of reports and research papers: overview of a research paper, selection of a research paper, plagiarism, citing sources, publication sources
Unit 9	Presenting your ideas: purpose of a presentation, components of a presentation, when to read or speak, preparation
Unit 10	Presenting your ideas: before the talk, on the podium, handling questions, strategic planning
Unit 11	Grammar for editing: basic sentences, verbs, nouns, editing a sentence
Unit 12	Grammar for editing: delayed subjects: it, there and what, the long and winding sentence, short sentences, parallelism
Unit 13	Working with words: misleading words, one word for many, complicated words, avoiding metaphors, redundant words
Unit 14	Working with words: linking words, expressing the degree of certainty, capitalization, sexist language

READINGS:

1. A COURSE IN ACADEMIC WRITING by RENU GUPTA, ORIENT BLACKSWAN PVT. LTD.
2. ENGLISH GRAMMAR by RAJEEVAN KARAL, OXFORD UNIVERSITY PRESS
3. OXFORD EAP: A COURSE IN ENGLISH FOR ACADEMIC PURPOSES by EDWARD DE CHAZAL AND SAM MCCARTER, OXFORD UNIVERSITY PRESS
4. MLA HANDBOOK by MODERN LANGUAGE ASSOCIATION OF AMERICA, MODERN LANGUAGE ASSOCIATION.

Course code	DEENG514	Course Title	INTRODUCTION TO THE STUDY OF LANGUAGE	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

CO1: identify vowels and consonants in phonetics.

CO2: distinguish between different parts of speech organs, place of articulation and manner of articulation.

CO3: describe syllable and stress patterns in relationship with aspects of connected speech in English language.

Unit No.	Content
Unit 1	Language and Phonetics: introduction to first and second language, introduction to phonetics
Unit 2	Language and Phonetics: meaning and importance of phonetics, difference between phonetics and phonology
Unit 3	The Production of Speech Sounds: introduction to the speech organs, articulators above the larynx
Unit 4	The Production of Speech Sounds: vowels and consonants, long vowels and short vowels
Unit 5	Vowels, Diphthongs, and Triphthongs: introduction to vowels, long vowels, short vowels
Unit 6	Vowels, Diphthongs, and Triphthongs: introduction, diphthongs, triphthongs
Unit 7	Voicing and Consonants: the larynx, respiration and voicing, plosives
Unit 8	Voicing and Consonants: place of articulation, manner of articulation, fortis and lenis
Unit 9	The Phoneme and Phonology: the functioning and patterning of sounds, the phoneme
Unit 10	The Phoneme and Phonology: the phonology, symbols and transcription, minimal pairs
Unit 11	The Syllable and Stress: strong and weak syllables, close front and close back vowels
Unit 12	The Syllable and Stress: syllabic consonants, nature of stress
Unit 13	The Syllable and Stress: levels of stress, placement of stress within the word
Unit 14	Aspects of Connected Speech: rhythm, assimilation, elision, linking

READINGS:

1. LINGUISTICS by CRYSTAL, DAVID, PENGUIN BOOKS INDIA
2. ENGLISH PRONOUNCING DICTIONARY by JONES, DANIEL, CAMBRIDGE UNIVERSITY PRESS
3. ENGLISH PHONETICS AND PHONOLOGY: A PRACTICAL COURSE by ROACH, PETER, CAMBRIDGE UNIVERSITY PRESS
4. MODERN LINGUISTICS: AN INTRODUCTION by VERMA, S.K & N. KRISHNASWAMY, OXFORD UNIVERSITY PRESS

Course code	DEENG519	Course Title	POST-INDEPENDENCE INDIAN LITERATURE	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

CO1: understand the social cultural and political dimensions of Indian Writing in English.

CO2: deduce the historical elements and theoretical orientation of Indian Writing in English.

CO3: analyze the stylistic techniques of Indian Writing in English.

CO4: trace the essential features of Indian Writing in English.

Unit No.	Content
Unit 1	Literary Terms: feminism, patriarchy, sexism
Unit 2	Literary Terms: misogynoir, misandry, LGBTQ
Unit 3	Literary Terms: gender issues, male gaze, womanism
Unit 4	Rupa Bajwa - The Sari Shop: plot and narrative technique
Unit 5	Rupa Bajwa - The Sari Shop: social and political background, character analysis and thematic analysis
Unit 6	Tagore - Leave this chanting and singing: textual, analysis, thematic analysis, symbols and motifs, stylistic features
Unit 7	Tagore - Kamala Das - My Grandmother's House: textual analysis, thematic analysis
Unit 8	Tagore - Kamala Das - My Grandmother's House: symbols and motifs, stylistic features
Unit 9	Difficult Daughters by Manju Kapur: about the author, plot, character analysis
Unit 10	Difficult Daughters by Manju Kapur: thematic analysis and gender issues, critical analysis
Unit 11	Mahesh Dattani - Final Solution: character analysis and thematic analysis
Unit 12	Mahesh Dattani - Final Solution: plot, narrative technique
Unit 13	Girish Karnad - Nagamandala: thematic analysis, narrative technique
Unit 14	Girish Karnad - Nagamandala: plot summary, character analysis

READINGS:

1. THE VINTAGE BOOK OF MODERN INDIAN LITERATURE by AMIT CHAUDHURI, VINTAGE BOOKS
2. THE SARI SHOP by RUPA BAJWA, PENGUIN BOOKS INDIA
3. NAGAMANDALA by GIRISH KARNAD, OXFORD UNIVERSITY PRESS
4. GITANJALI: RABINDRANATH TAGORE by RABINDRANATH TAGORE, RUPA PUBLICATIONS
5. KAMALA DAS by DR. N. K. SHARMA, Unique Publisher
6. FINAL SOLUTIONS by MAHESH DATTANAI, PENGUIN BOOKS INDIA
7. DIFFICULT DAUGHTERS by MANJU KAPUR, PENGUIN BOOKS INDIA

Course code	DEENG527	Course Title	POSTCOLONIAL LITERATURES AND CULTURAL STUDIES	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

C01: identify the impact of colonialism on culture.

C02: estimate the significance of the post-colonial era in the life of its inhabitants.

C03: apply the post-colonial theory of Homi Bhabha and Edward Said in the prescribed texts.

C04: justify new trends in post-colonial discourse through the lens of selected texts.

Unit No.	Content
Unit 1	Salman Rushdie: Midnight's Children: Midnight's Children as a post-colonial epic, technique of magic realism of Rushdie
Unit 2	Salman Rushdie: Midnight's Children: discussion of the plot of the novel, epical features of the novel
Unit 3	Salman Rushdie: Midnight's Children: character of Saleem and his importance, the themes of alienation and cultural dislocation
Unit 4	Chinua Achebe: Things Fall Apart: Struggle for dominance and identity crisis, introduction to the African culture
Unit 5	Chinua Achebe: Things Fall Apart: theme of cultural destruction, hybridity and marginalization
Unit 6	Chinua Achebe: Things Fall Apart: theme of gender discrimination in the novel, conflict between tradition and modernity
Unit 7	Bapsi Sidhwa: The American Brat: the life and achievements of the writer, the theme of male domination in society, Feroza's American experience
Unit 8	Bapsi Sidhwa: The American Brat: cultural assimilation of Feroza and the application of Bhabha's theory of hybridity, loss of identity of Feroza in America, cultural conflicts between Parsee culture and American culture, the character of Zareen
Unit 9	Jean Rhys: Wide Sargasso Sea: introduction to the writer, race, relations and prejudice, the theme of oppression of slavery
Unit 10	Jean Rhys: Wide Sargasso Sea: the episodes of magic and incantation in the novel, male domination and patriarchal power structure, discussion on the characters and themes
Unit 11	Derek Walcott: Dream On Monkey Mountain: the significance of the title of the drama, the post-colonial elements in the drama, the theme of the loss of identity
Unit 12	Derek Walcott: Dream On Monkey Mountain: the theme of marginalization and the application of the theory of Homi Bhabha, Makak and his confrontation with the colonial rulers, the significance of the ending of the drama
Unit 13	Margaret Atwood: Surfacing: the life and achievements of the writer, the significance of the title, the theme of alienation and the application of the theory of hybridity of Homi Bhabha
Unit 14	Margaret Atwood: Surfacing: the postcolonial elements in the novel, the theme of feminism in the novel, the role of nature in the novel, the plot structure of the novel

READINGS:

1. MIDNIGHT'S CHILDREN by SALMAN RUSHDIE, VINTAGE BOOKS
2. THINGS FALL APART by CHINUA ACHEBE, ANCHOR BOOKS
3. SURFACING by MARGARET ATWOOD, ANCHOR BOOKS
4. AMERICAN BRAT by BAPSI SIDHWA, MILKWEED EDITIONS

5. DREAM ON MONKEY MOUNTAIN by DEREK WALCOTT, FARRA, STRAUS
6. WIDE SARGASSO SEA by JEAN RHYS, PENGUIN CLASSICS

Course Code	DEPOL525	Course Title	POLITICAL INSTITUTIONS IN INDIA	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

CO1: understand the leading institutions of the Indian political system and the changing nature of these institutions.

CO2: assess the laws pertaining to elections and analyse the electoral system of India.

CO3: enumerate the working of the Indian federalism in the constitutional context.

CO4: distinguish the powers and functions of various organs of the government.

CO5: discuss about various constitutional and statutory bodies of India.

CO6: evaluate the functioning of the local government institutions.

Unit No.	Content
Unit-1	Indian National Movement to the Making of the Indian Constitution: Definitions of Constitution, Functions of Constitution, Evolution of the Indian Constitution 1858-1935, The Company Rule (1773-1858), The Crown Rule (1858-1947)
Unit-2	Constituent Assembly: Meaning of Constituent Assembly, Evolution of the Concept of Constituent a Assembly in India, Cabinet Mission Plan and the Formation of the Constituent Assembly, Composition of the Constituent Assembly, Working of the Constituent Assembly, Objective Resolution, Gandhian Ideology, Constitution Assembly Debates, Decision Making in the Constituent Assembly
Unit-3	Philosophy of the Constitution: Key Words in the Preamble, Salient Features of the Constitution, Fundamental Rights, Directive Principles of State Policy
Unit-4	Constitutionalism in India: Democracy, Features of the Indian Democracy, Social Change, Factors of Social Change, National Unity, Separation of Powers, Basic Structure Doctrine, Evolution of Basic Structure Doctrine, Procedure of Amendment
Unit-5	Union executive: President, Powers and Functions of the President, Prime Minister, Council of Ministers
Unit-6	Union Parliament: Composition of the Parliament, Officials of Rajya Sabha, Sessions of Parliament, Functions of Parliament, Parliamentary Committees
Unit-7	Judiciary Part-I: Supreme Court: Jurisdiction and Powers, High Court: Jurisdiction and Powers
Unit-8	Judiciary part -II: Judicial Review, Judicial Activism, Judicial Restraint, Judicial Reform
Unit-9	State executive: Governor, Powers and Functions of Governor, Position and Role of the Governor, Chief Minister, Powers and Functions of Chief Minister, Council of Ministers
Unit-10	State Legislature: Composition of Two Houses, Duration of Two Houses, Membership of State Legislature, Presiding Officer, Sessions of State Legislature, Powers and Functions of the State Legislature, Position of legislative council, Privileges of State Legislature
Unit-11	Federalism in India: Nature and Scope, Centre-State Relations, Federalism with a Strong Central Government, Role of Intergovernmental Coordination Mechanisms in Indian Federalism
Unit-12	Electoral Process and Election Commission of India: Election Commission, Electoral Reforms, Issues in Electoral Politics in India, Electoral Reforms Undertaken, Functioning and Reforms of the Local Government Institutions
Unit-13	Constitutional and Statutory Bodies Part -I: Comptroller and Auditor General: Duties and Powers, National Commission for Scheduled Castes: Evolution and Functions, National Commission for Scheduled Tribes: Function and Reports

READINGS:

1. INDIAN GOVERNMENT AND POLITICS by BIDYUT CHAKRABARTY, RAJENDRA KUMAR PANDEY, SAGE PUBLICATIONS.
2. THE INDIAN CONSTITUTION: CORNERSTONE OF A NATION by AUSTIN GRANVILLE.

Course Code	DEPOL527	Course Title	PUBLIC POLICY AND GOVERNANCE IN INDIA	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

CO1: understand the nature and scope of public policy and administration in India.

CO2: assess the major problems and complexities in India's governance system.

CO3: appreciate the methodological pluralism and synthesizing nature of knowledge in public policy and administration.

CO4: analyse the changing dimensions and patterns in India's public governance and administrative processes.

CO5: evaluate the role of non-state actors and civil society in India's public governance system.

Unit No.	Content
Unit-1	Public Policy and Administration in India: Meaning and Concept of Public Policy; Meaning, Evolution, Scope and Importance of Public Administration; Public Policy & Public Administration in India, Evolution of Indian Administration
Unit-2	Public and Private Administration: Approaches, System Theory, Organization Theory, Decision Making Theory,
Unit-3	Public Administration Theories and Concepts: Meaning, Ecological Approach
Unit-4	Scientific Management Theory, Rational Choice theory, New Public Administration, Development Administration
Unit-5	Comparative Public Administration in India: Comparative Public Administration in India
Unit-6	New Public Management: Themes, Significance, Consequences, Good Governance
Unit-7	Changing Nature of Public Administration: Case of Bureaucracy, Characteristics of Bureaucracy, Impact of Globalization
Unit-8	Theories and Principles of Organisation and its Operations in India: Principles of Organisation, Theories of Organisation: Classical, Neo-classical & Modern Bureaucratic Theory, Human Relations Theory
Unit-9	Managing the Organization: Theories of Leadership, Types of Theories of Leadership, Trait Theory, Behavioural Theory, Theories of Motivation
Unit-10	Organisational Communication: Theories and Principles, Theory X & Theory Y, Functioning in India and its impacts
Unit-11	Chester Bernard: Principles of Communication, Information Management in the Organization
Unit-12	Conflict in the Organization: Factors influencing conflict, Views of Mary Parker Follett, Views of Peter Drucker
Unit-13	Public Policy and Governance in India: Types of Public Policy, Stages, Basis of Policy-Making
Unit-14	Public Policy Issues and Challenges in India: Constraints in Policy Implementation

READINGS:

1. INTRODUCTION TO THE STUDY OF PUBLIC ADMINISTRATION by SHAFRITZ, J.M. AND HYDE, WADSWORTH
2. PUBLIC ADMINISTRATION IN INDIA by STERLING PUBLICATIONS, STRELING PUBLICATIONS.

Course Code	DESOC515	Course Title	FUNDAMENTALS OF SOCIOLOGY	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to

CO1: articulate all the methodical concepts to understand the social system and function.

CO2: collect information regarding various social units in terms of structural and functional analysis.

CO3: examine structural and functional significance of social institution.

CO4: innovate ideas to create pathways for the social problems.

CO5: apply theoretical understanding in the process of social change and mobilization.

CO6: analyse the process of social exclusion and inclusion in terms of policy making and development program.

Unit No.	Content
Unit-1	Introduction to Sociology: Definition, Nature and Importance, Relation of Sociology with other social sciences-Economics, History, Political Science, Psychology and Social Anthropology
Unit-2	Sociology and other Social Studies: Branches of Sociology-Industrial Sociology, Political Sociology, Sociology of Family, Sociology of Education, Medical Sociology, Urban and Rural Sociology
Unit-3	Sociological Imagination: Development of Sociology as a Social Science and Sociological Prospective
Unit-4	Basic Concepts: Society, Community, Association and Institution –Social Groups, Social Structure and function, Role and Status, Social Stratification and Mobility, Social Control, Social process and Social Change.
Unit-5	Sociology of Culture: Culture and Socialization Definition-Features, Elements, Types, Cultural Relativity, Ethnocentrism, Cultural lag, Cultural System & sub-system, cultural change.
Unit-6	Social Institutions: Marriage, Family, Kinship, Religious Institutions, Economic Institution, Educational Institution and Political Institutions
Unit-7	Indian Social Institutions (I): Caste System, Jajmani System, Major religious practices
Unit-8	Indian Social Institutions (II): Indian Agriculture: farmers movements, Primary education, Mid-day meal, privatization of higher education, Research and development
Unit-9	Social Problems (I): Definition, Nature, Cause, Proposals, Legal and Constitutional measures in controlling social problems.
Unit-10	Social Problems (II): Family Disorganisation, Problem of Child Labour, Problem of Aged, Gender issues and Gender problems,
Unit-11	Social Problems (III): Communal Riots, corruption, terrorism, Alcoholism and Drug Addiction, problem of Unemployment, untouchability, population problem, Rural and Urban Problems, Nepotism
Unit-12	Social Change: Meaning Definition, Nature and Importance, Types of Social Change
Unit-13	Social Movement: Peasant movement, Dalit Movement, Backward Classes movement, Social Reform Movement
Unit-14	Social Inclusion and Exclusion: Meaning-Nature-issues and problems of Social Inclusion/Exclusion among Scheduled Caste and Class-Scheduled Tribes, Neo Buddhist movement, Women empowerment

READINGS:

1. SOCIOLOGY: PRINCIPLES OF SOCIOLOGY WITH AN INTRODUCTION TO SOCIAL THOUGHTS by RAO C.N. SHANKAR. S CHAND.
2. FUNDAMENTALS OF SOCIOLOGY by VIDYA BHUSHAN, PEARSON EDUCATION.
3. FUNDAMENTALS OF SOCIOLOGY by GISBERT P. ORIENT BLACK SWAN, THIRD EDITION (2010).
4. FUNDAMENTALS OF SOCIOLOGY by RAJENDRA KUMAR SHARMA, ATLANTIC.1ST EDITION (2013).

Course Code	DESOC506	Course Title	GLOBALIZATION AND SOCIETY	
			WEIGHTAGE	
			CA	ETE (Th.)
			30	70

Course Outcomes: Through this course, the student will be able to
C01: understand the concept and evolution of globalization.
C02: analyze the impact of globalization on Indian society and economy.
C03: evaluate globalization's influence on culture and communication.
C04: examine economic transformations in a globalized world.
C05: critically assess globalization's environmental and social challenges.
C06: predict the future of globalization and India's role in it.

Unit No.	Content
Unit-1	Introduction to globalization: concept, history of globalization
Unit-2	Dimensions of globalization (i): social, cultural, political
Unit-3	Dimensions of globalization (ii): Economic and ecological dimension
Unit-4	Globalization in India: Perspectives, Globalization and reforms in India, Impact of Globalization on women and poor
Unit-5	Globalization in society: Family, marriage, relationship
Unit-6	Globalization in Culture: Language and communication, Social Structure
Unit-7	Globalization in education: Learning, Access to education, Technological gap
Unit-8	Globalization in economy: Globalization of Indian banks with WTO regime
Unit-9	Business Process Outsourcing (BPO): an emerging trend in India
Unit-10	Micro finance, Economic liberalization: free market policy
Unit-11	Globalization in the environment: Tourism, Pollution, Global warming
Unit-12	Global crises: globalization as an inevitable process, The East Asia crises
Unit-13	Globalization in Indian society: Indian economy after globalization, Impact of globalization on Indian Agrarian class structure and culture, towards an Alternative view and vision
Unit-14	Future of globalization: future of globalization, Broken promises of global institution

READINGS:

1. S.K. PRAMANIK, R GANGULY, GLOBALIZATION IN INDIA: NEW FRONTIERS AND EMERGING CHALLENGES, PHI LEARNING PVT LTD
2. BABITA AGARWAL, ANIL AGARWAL, GLOBALIZATION AND INDIAN SOCIETY, AP PUBLISHER
3. MANFRED B. STEGER, GLOBALIZATION: A VERY SHORT INTRODUCTION, OXFORD UNIVERSITY PRESS