Course Title:	Human Resource Management	Contact Hrs/ Week:	4
Course Code:	MGBA1C006T	Credit:	4
Duration of Exam:	3 hours	Maximum Marks:	100

Course Objective

The objective of the course is to provide an overview of the principles, practices, functions of HRM, systems and strategies in managing people professionally in view of the rapidly evolving aspirations of individuals, and changing business contexts. The course is designed to familiarize learners with human resource policies and practices that they need to know regardless of their field of managerial functions. The course will provide basic concepts, techniques, and practices of human resource management.

Learning Outcomes

Upon successful completion of the course, students will be able to:

- To understand the importance of managing human resources professionally, in view of the constantly changing aspirations of individuals, the business context, and organizational dynamics;
- 2. To understand and the foundations of managing human resources in organizations, in terms of systems, strategies and practices;
- 3. To appreciate the need for well-designed HR policies that enhances employee motivation and performance;
- 4. To learn tools and techniques of human resource management systems;
- 5. To understand the dynamics of managing people from real world examples.

Course Outcomes

Aligned with the learning outcomes, the course outcomes include:

- 1. To apply the concepts and perspectives in HRM
- 2. To interpret and Conceptualise HRP, JA, Recruitment, Selection, Induction, Succession Planning and Job Evaluation
- 3. To describe Training & Development and Performance Appraisal
- 4. To apply the concepts of compensation, benefits and employee welfare
- 5. To demonstrate skills in managing Industrial Relations.

Unit I Introduction to Human Resource Management

Human Resource Management: Foundations and Principles of Managing People in Organizations: Concepts and Repairs Contemporary issues and challenges in managing human resources Models of HRM: The Harvard Model, The Michigan Model

A grace

Unit II Manpower Management

Human Resource Planning: Steps, Factors; Job Analysis: Job Description & Job Specification; Recruitment: Steps, Sources & Methods of Recruitment, Selection: Stages in Selection Process, Selection Tests, Reliability & Validity in Selection, Induction: Objectives, Procedure and Techniques, Succession Planning, Job Evaluation: Objectives, Methods: Quantitative & Non Quantitative

Unit III Training and Development

Training: Purpose & Principles, Training Need Analysis, Methods of Training, Executive Development: Need, Techniques of Management Development, Promotions: Types, Suspension, Dismissal, Resignation, Separation: Procedure, Purpose, Transfers: Retrenchment, Lay-off, Performance Appraisal: Process, Methods-Traditional & Modern, **Problems**

UNIT IV Compensation, Benefits and Employee Welfare

Compensation: Objectives, Factors, Components, Benefits, Quality of Work Life, Employee Engagement: Levels, Building Blocks, Employer Branding

Unit V Industrial Relations

Industrial Relation: Objectives, Nature, Scope, Preventive & Settlement Machinery, Trade Unions: Objectives, Functions, Classification, Problems, Grievance: Forms, Causes, Collective Bargaining: Process, Workers Participation in Management

Note: Teaching Pedagogy

- * Teaching Pedagogy besides classroom teaching will essentially include simulation, case studies, role plays and games.
- * Teaching-learning Process will involve input from those who have demonstrated excellence in the area i.e. Practioner's view will be incorporated.

Reference Books and Suggested Readings

- Armstrong, M. Armstrong's Handbook of Human Resource Management Practice, Kogan Page
- Dessler, G., Human Resource Management, Pearson Education, 13th Edition
- DeCenzo, D. A., & Robbins, S. P. (2010). Fundamentals of Human Resource Management, John Wiley & Sons.
- E. Schuller Human Resource Management, Concept ,Cases and Readings, PHI
- Fisher, Schoenfeldt and Shaw, Managing Human Resource, Cengage Learning
- Lata & Nair Personnel Management & Industrial Relations ,S. Chand
- Mamoria, C. B., Rao, V. S. P., Personnel Management, Himalya Publishing House, New Delhi
- Monappa & Saiyadain, Personnel Management, Tata McGraw Hill, New Delhi.

Pattanayak, B., Human Resource Management. PHI (EEE)

Course Title:	Marketing Management	Contact Hrs./Week:	4
Course Code:	MGBA1C007T	Credit:	4.
Duration of Examination:	3 hours	Maximum Marks:	100

Course Objective:

- Introduce students to the fundamental concepts and techniques of marketing management.
- Provide a detailed understanding of the various elements of the marketing mix.
- Develop students' ability to create effective marketing strategies for each element of the marketing mix.
- Enhance students' understanding of consumer behavior and its impact on marketing decisions

Course Learning Outcomes:

- Explore the role of marketing within an organization's overall business strategy and create a marketing plan aligned with its objectives.
- Assess the components of the marketing mix (product, price, promotion, and place) and develop strategies tailored to each element.
- Focus on customer relationship management to craft strategies that deliver value and build long-term customer loyalty.
- Investigate psychological, social, and cultural factors affecting consumer behavior and use these insights to shape marketing strategies.
- Carry out market research, analyze the collected data, and interpret findings to support well-informed marketing decisions.

Teaching Learning Methodology:

To achieve the objectives of this course, a variety of methods shall be employed to make the students understand the real essence of the course. Some of the major methods adopted are as follows:

- Classroom Lectures using power point presentations
- Industry based Case Study discussions
- Peer Learning i.e. Presentations by the students
- Quizzes and Debates on contemporary topics

Course Contents:

Unit I: Foundations of Marketing

Understanding Marketing and its Core Concepts, Distinguishing Marketing Management Tasks, Philosophies of Marketing Management, and Analysis of the Micro and Macro Marketing Environment.

Cy

Unit II: Strategy and Consumer Insight

Deep Dive into Marketing Mix Components, Market Segmentation and Positioning, Techniques of Market Targeting, Unraveling Consumer Buying Behaviour, Exploration of the Consumer Decision-making Process, and Pricing Decisions: Factors affecting Pricing Decisions, Pricing Strategies, Types of Pricing

Unit III: Product Management and Innovation

Grasping Basic Product Concepts, Product Mix and Product Line Decisions, The Art of Branding, New Product Development and Innovation Diffusion, and Strategies for Different Phases of Product Life Cycle.

Unit IV: Distribution, Communication, and Global Reach

Understanding Functions of Marketing Channels, Designing Effective Marketing Channels, Elements and Concepts of the Promotion Mix, Basics of International Marketing, and Introduction to Marketing Information Systems.

Unit V: Contemporary Marketing Practices

Dynamics of Digital and Web Marketing, E-Marketing Strategies, Sustainable and Green Marketing, Integrating Artificial Intelligence in Marketing, and Experience and Relationship Marketing in the Digital Age.

Assessment Methods:

Students would be assessed for their learnings out of this course on a continuous evaluation basis throughout the semester. Some of the major assessment methods used are as follows:

- Periodic Presentations/Assignments (Individual/Team) of the students
- Debates/Group Discussion/Quiz as per the nature of the topic
- Peer competition within the class by making different teams
- Mid Term Examinations
- End Term Examinations

Suggested Reading

- 1. Kotler, P., & Keller, K. L. (2020). Marketing management (16th ed.). Pearson.
- 2. Armstrong, G., & Kotler, P. (2019). Marketing: An introduction (14th ed.). Pearson.
- 3. Solomon, M. R. (2019). Consumer behavior: Buying, having, and being (12th ed.). Pearson.
- 4. Ramaswamy, V., & Namakumari, S. (2016). Marketing management: A contemporary perspective. Pearson Education India
- 5. Belch, G. E., & Belch, M. A. (2019). Advertising and promotion: An integrated marketing communications perspective (12th ed.). McGraw-Hill Education.

Course Title:	Financial Management	Contact Hrs/ Week: 4
Course Code:	MGBA1C008T	Credit: 4
Duration of Exam:	3 hours	Maximum Marks: 100

Course Objective

The course aims to equip students with a comprehensive understanding of financial management concepts, tools, and practices. By fostering analytical and decision-making skills, the course prepares students to manage financial resources effectively, make informed investment decisions, and understand the interrelationship between financial management and other functional areas of management.

Learning Outcomes

Upon successful completion of the course, students will be able to:

- 1. Understand the foundational concepts, scope, and objectives of financial management, including risk-return tradeoffs and the time value of money.
- 2. Apply capital budgeting techniques to evaluate investment decisions effectively.
- 3. Evaluate the sources of long-term and short-term financing and analyze capital structure decisions.
- 4. Compute and manage working capital requirements and explore financing options for current assets.
- 5. Assess dividend decisions and financial modeling concepts using relevant theories.

Course Outcomes

Aligned with the learning outcomes, the course outcomes include:

- 1. Students will articulate the fundamental principles of financial management, including profit maximization vs. wealth maximization, agency problems, and time value concepts.
- 2. Students will demonstrate the ability to apply traditional and discounted cash flow techniques in capital budgeting decisions, including the calculation of cost of capital.
- 3. Students will critically analyze the determinants of capital structure, financial leverage, and theories such as Modigliani-Miller Hypothesis.
- 4. Students will compute working capital requirements and assess the implications of different short-term financing sources.
- 5. Students will evaluate dividend policies and theories, applying models like Walter's Model, Gordon's Model, and Modigliani-Miller Hypothesis to make informed decisions.

Unit-I

Introduction

Concept, scope, classification and organization of Finance function, Financial Decisions, Objectives of Financial, Basics of Risk Return Tradeoff, Agency Problem, Profit maximization vs. Wealth maximization. Time Value of money. Discounting and Compounding.

\$ 9000

Capital Budgeting: Nature and concept of Capital Budgeting, Techniques of Capital Budgeting Traditional: Pay Back Period, Accounting Rate of Return. Discounted Cash Flow (DFC): Net

Present Value(NPV), Internal Rate of Return(IRR), Profitability Index(PI). Cost of capital: Cost of Equity, Cost of Preference Shares, Cost of Debt, Cost of Retained

Earnings and weighted average cost of capital.

Unit-III Sources of Long Term Funding & Financing Decision

Financing Fixed Assets- (Long Term Sources) Shares, Debentures, financial service leasing,

Hire purchase Venture capital

Leverage: Financial Leverage (Financial Risk), Operating Leverage (Business Risk), Degree of

Operating, Financial and Combined leverage

Capital Structure - Determinants of capital structure. Approaches to establish Appropriate

Capital Structure- EBIT-EPS Approach (Indifference point in Capital Structure).

Capital Structure Theories -Net Income Approach, Net Operating Income Approach & Modigliani-Miller Hypothesis.

Unit-IV Working Capital Management

Working Capital Management: Concept of working capital, Factors affecting working capital requirement. Computation of average working capital requirements. Financing Current Assets-(Short-term Sources): Public Deposits Financing through Bank (CC limit / OD, LOC and Commercial papers, and Factoring

Unit-V

Management of Earnings

Types of Dividend, Dividend Payment - retention decision: Factors influencing dividend Decision. Dividend Theories - Dividend Theories of Relevance— Walters Model, & Gordon's Model, Dividend Theories of Irrelevance — Modigliani-Miller Hypothesis.

Note: Teaching Pedagogy

- * Case studies: Use case studies to help students apply financial management concepts and theories to real-world situations. Case studies can be used to stimulate discussion and critical thinking, and can help students understand how financial management principles are applied in practice.
- Simulation: Use Share Market Simulation to enable students apply financial management concepts and techniques to make informed investment decisions.
- . Group work: Group work can help students develop teamwork and communication skills, and can also facilitate the exchange of ideas and perspectives.
- * Interactive lectures: Interactive lectures can help students develop critical thinking and problem-solving skills, and can also make the material more relevant and meaningful for students.
- . Online resources: Use online resources, such as videos, podcasts, and articles, to supplement traditional lectures and provide students with additional learning resources.

ment thousand

Reference Books and Suggested Readings

- Financial Management, I.M. Pandey, Pearson Publishing House, 12th edition
- Financial Management, Text Problems and Cases, M.Y. Khan & P.K. Jain Tata Mc GrawHill
- Financial Management and Policy, Van Horne, Prentice Hall India
- Financial Management Theory and Practice. Parsana Chandra Tata Mc Graw Hill Pvt. Ltd.

My ottate.

Course Title:	Corporate Legal Framework	Contact Hrs/ Week:	4
Course Code:	MGBA1C009T	Credit:	4
Duration of Exam:	3 hours	Maximum Marks:	100

Course Objective:

The course aims to provide students with a thorough understanding of corporate legal frameworks that govern business entities and transactions. The primary objective is to equip students with knowledge and analytical skills to apply corporate law principles to business scenarios, ensuring legal compliance and effective decision-making.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- 1. Understand the fundamental principles of the Indian Contract Act, including contract formation, validity, discharge, and remedies for breach of contract.
- 2. Explain the key provisions of the Companies Act, including company formation, incorporation, MoA, AoA, and shareholding structure.
- 3. Analyze the legal framework governing partnerships and the contract of sale of goods, including essential elements, rights, duties, and liabilities.
- 4. Examine the Negotiable Instruments Act and the Consumer Protection Act, understanding their significance in business transactions and consumer rights.

Course Outcomes:

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

- 1. Identify and explain the essential elements of valid contracts and different types of contracts.
- 2. Evaluate legal aspects of company formation, share issuance, and corporate governance.
- 3. Demonstrate an understanding of partnership agreements and the sale of goods under the Indian legal framework.
- 4. Interpret the legal significance of negotiable instruments and consumer rights.
- 5. Assess the role of Intellectual Property Rights in business and analyze legal issues in emerging technological and global business contexts.

Unit-I The Indian Contract Act

Meaning and Essentials of contract, Characteristics of Contract, Kinds of contract based on validity, formation & performance; Types of Contract Offer, Void Agreements, Performance &

)

6

Done

Discharge of Contract; Breach of Contract & its remedy, Brief about Special Contracts-Contract of Indemnity and Guarantee, Contract of Bailment and Pledge, Contract of Agency.

Unit-II The Companies Act

Definition of a Company, Main characteristics of a company, Classification of companies, Stages in the formation of a Company; Incorporation of a company; Memorandum of Association (MoA), Articles of Association (AoA), Shares and debentures, Issuing of shares, Forfeiture of shares.

Unit-III The Partnership and Contract of Sale of Goods Act

Definition & Meaning of Partnership; Essential elements of Partnership; Test of Partnership; Types of Partnership, Types of Partners, Formation and Registration of Partnership; Rights, Duties and Liabilities of Partners. Contract of Sale of Goods, Sale and Agreement to sell; Essentials of a contract of sale; Sale and Hire-Purchase Agreement; Conditions and Warranties.

Unit-IV The Negotiable Instrument Act and The Consumer Protection Act

Negotiable Instruments-Meanings and Characteristics, Types of Negotiable instruments, Parties to a negotiable instrument, Bills of Exchange, Cheques (characteristics, types, Bouncing of cheque), Promissory Notes, Distinction between bills of exchange & cheques.

The Consumer Protection Act: Aims and objects of the Act, Rights of a consumer; Concept of Complaint and Complainant; Procedure on receipt of complaints, Consumer Protection Councils.

Unit-V Intellectual Property Rights and Emerging Legal Issues

Intellectual Property Rights: Objectives & Essentials of Competition Act, Intellectual Property Rights & Laws (Patents, Copyrights, Trademark, Geographical Indications),

Emerging Legal Issues: Blockchain, AI, Digital Contracts and ESG, Legal Issues in Multinational Operations, Privacy Law and Internet Regulation

Teaching Pedagogy

- Lectures: Foundational understanding of legal frameworks.
- Case Studies: Application of laws to real-world corporate scenarios.
- Hands-On Projects: Drafting legal documents, analyzing disputes, and providing solutions.
- Group Discussions and Role Plays: Collaborative learning on legal and ethical issues.

Guest Lectures: Insights from practitioners and legal experts.

Offit.

Reference Books and Suggested Readings

- 1. Boatright, J. R. (2006). Ethics and the conduct of business (6th ed.). Pearson Education.
- 2. Fernando, A. C. (2006). Corporate governance: Principles, policies, and practices (1st ed.). Pearson Education.
- 3. Gulshan, S. K. (2007). Mercantile law (3rd ed.). Excel Books.
- 4. Kapoor, G. K., & Dhamija, S. (n.d.). Company law and practice: A comprehensive textbook on Companies Act 2013. Taxmann.
- 5. Kuchhal, M. C. (2005). Business law (4th ed.). Vikas Publishing.
- 6. Kapoor, N. D., & Abbi, R. (n.d.). General laws & procedures. Sultan Chand & Sons.
- 7. Singh, A. (n.d.). Principles of mercantile law. Eastern Book Company.
- 8. Velasquez, M. G. (2007). Business ethics: Concepts and cases (6th ed.). Pearson Education.

, 1

Course Title:	Indian Knowledge System	Contact Hrs./Week:	02
Course Code:	UGBA10001T	Credit:	02
Duration of Examination:	2 hours	Maximum Marks:	50

Course Objective:

The main aim of the course is to acquaint the students with the versatile knowledge system and heritage of India. This course is designed to familiarize the students about the importance of IKS in business decision making. The learning of Vedas, Kautiya's Arthshastra and Srimad Bhagwat Gita have been included to enable the students to apply this knowledge in real world decision making.

Learning Outcomes:

Upon successful completion of the course, students will be able to:

- Understand the foundational concepts about IKS and its importance in business management
- To comprehend the ancient Indian philosophy, by delving upon the Kautilya's Arthshastra and its application in business decision making.
- To understand learnings from Srimad Bhagwat Gita in modern management context

Course Outcomes:

Aligned with the learning outcomes, the course outcomes include:

- Students will be able apply the fundamental principles of IKS to real world business challenges.
- Able to critically evaluate philosophical foundations of Indian knowledge, by delving upon the Kautilya's Arthshastra and its application in business decision making.
- Acquaintance with wisdom from Srimad Bhagwat Gita and its significance in modern management.

Course Content

Unit -1

Indian Knowledge System:

An Overview of IKS, Why do we need IKS, Origin of the Vedas, Composition and Major teachings of Vedas-Implications for Management

Understanding spirituality in the Vedas, Concepts of Dharma, Karma, and Moksha, Relevance of Vedic spirituality in management in modern times. Relevance of Vedas in management in modern times. Indigenous frugal innovations, Case study of Mahakumbh, Mega kitchens.

Unit-2

Kautalya Arthashastra:

Overview of the Arthashastra, Structure and organization of the Arthashastra, Main themes in Arthashastra, Arthashastra's relevance in different aspects of governance, Kautalyas' Saptanga Theory, Economic Ethics and Justice in Arthashastra, Arthashastra's contribution to modern day management.

Unit -3

Srimad Bhagvat Gita & Management:

Historical and Philosophical Context, Management Principles in the Bhagavad Gita- Karma Yoga (Path of Action), Jnana Yoga (Path of Knowledge), Bhakti Yoga (Path of Devotion),

Leadership Insights from the Bhagavad Gita, Strategic Management and Bhagavad Gita, Stress Management and Resilience, Motivation and Self-Management, Application of Bhagavad Gita in Modern Business Practices

Teaching Learning Methodology:

To achieve the objectives of this course, a variety of methods shall be employed to make the students understand the real essence of the course.

- Classroom Lectures using power point presentations
- · Case Study discussions
- Peer Learning and Role Plays.
- Quizzes and Debates on relevant topics

Text Books:

- Introduction to Indian knowledge system: concepts and applications By B.
 Mahadevan, Nagendra Pavana, Vinayak Rajat Bhat, PHI Publications.
- Bhagavad Gita: As It Is" by A.C. Bhaktivedanta Swami Prabhupada Published by The Bhakti Vedanta Book Trust
- Arthashastra by Kautilya A Masterpiece On Economic Policies, Kautalya, Timeless Teachings

Reference Books:

- "Indian Philosophy, Volume 1 and 2 by S. Radhakrishnan Published by Oxford university press.
- Leadership Lessons from the Bhagavad Gita, Ace V. Simpson (2024), Bloomsburry.
- Kautilya's Arthashastra Strategic Cultural Roots of India's Contemporary Statecraft,
 Kajari Kamal, Routledge India

Course Title:	Introduction to Python	Contact Hrs/ Week:	4
Course Code:	UGBA0O011T	Credit:	4
Duration of Exam:	3 hours	Maximum Marks:	100

Course Objectives: To provide students to gain the ability to leverage data analysis, automate tasks, and develop business applications, enabling them to make data-driven decisions and improve operational efficiency within organizations.

Learning Outcomes

- 1. Understand the fundamentals of Python programming.
- Utilize core Python concepts such as operators, built-in data types, conditional statements, loops, functions, and file processing to develop functional Python programs.
- 3. Develop proficiency in using Python libraries such as NumPy, Pandas for data manipulation, analysis, and visualization.
- 4. Explore web scraping techniques using Python to extract relevant data from online sources for market research, competitive analysis, and business intelligence.
- 5. Create effective data visualizations using Matplotlib and Seaborn, including usage of Pyplot functions to represent and communicate data insights clearly and effectively.

Course Outcomes (COs):

Upon successful completion of this course, students will be able to:

- 1. Demonstrate a clear understanding of Python programming fundamentals, including syntax, variable declarations, and basic expressions.
- 2. Apply Python operators, data types, conditional statements, loops, functions, and file processing to create functional Python programs.
- 3. Utilize Python libraries such as NumPy and Pandas for efficient data manipulation, analysis, and preprocessing.
- 4. Implement web scraping techniques using Python to gather relevant data from online sources for business and analytical purposes.
- 5. Develop effective data visualizations using Matplotlib and Seaborn to interpret and communicate data-driven insights.

Unit 1: Fundamentals of Python Programming

Need for Programming, Programming languages, History of python, Python Installation, Python variable declaration, Entering Expressions.

Unit 2: Core Python Concepts

Otofi.

Mentha Ay S

Python's Operators, Python's Built-in Data types, Conditional Statements & Loop, Functions in python, File processing

Unit 3: Data Handling with NumPy and Pandas

Introduction to NumPy: NumPy Array, Operations on Arrays, Indexing and Slicing; Introduction to Pandas: Series and Data frames – simple examples

Unit 4: Web Scraping and Data Handling

Web Scraping; HTML Handling; Working with Excel Spreadsheets:

Unit 5: Data Visualization

Introduction to Data visualization: Matplotlib – Usage of Pyplot, Pyplot functions with examples and Seaborn with simple examples

Teaching Pedagogy:

- Lecture-Based Teaching: Explanation of fundamental concepts using slides and whiteboard demonstrations. Step-by-step coding examples to illustrate concepts in real-time.
- 2. Hands-on Programming Sessions: Practical coding exercises during lab sessions to reinforce theoretical concepts.
- 3. Case Studies and Real-World Applications
- 4. **Project-Based Learning:** Mini-projects involving data analysis, visualization, and automation using Python. Team-based projects to enhance collaboration and problem-solving skills.
- 5. **Assignments and Assessments:** Regular coding assignments and quizzes to assess understanding. Hands-on practical exams to evaluate Python programming proficiency.

Suggested Readings:

- 1. Python for Everybody by Charles R Severance, 2016
- 2. Data Analysis from Scratch with Python by Peters Morgan, AI Sciences LLC, 2016
- 3. Fundamentals of python by Kenneth A lambert, 2014, Cenaege Learning
- 4. Fundamentals of python by Richard L Haltman, 2019
- 5. Wesley J Chun, "Core Python Applications Programming", 3rd Edition, Pearson Education India, 2015.
- Roberto Tamassia, Michael H Goldwasser, Michael T Goodrich, "Data Structures and Algorithms in Python", 1st Edition, Wiley India Pvt Ltd, 2016.
- 7. ReemaThareja, "Python Programming using problem solving approach", Oxford University press, 2017.

Acom Numes

Course Title:	Al in Business Management	Contact Hrs/ Week:	4
Course Code:	UGBA0O012T	Credit:	4
Duration of Exam:	3 hours	Maximum Marks:	100

Course Objective

This course is designed to provide an introductory understanding of Artificial intelligence (AI) concepts, tools, technologies and applications in business contexts. Through lectures and case studies students will explore how Artificial intelligence is transforming industries, driving innovation and shaping business strategies.

Learning Outcomes

Upon successful completion of the course, students will be able to:

- 1. Understand the fundamental concepts of Artificial intelligence (AI).
- 2. Understand popular AI tools and technologies.
- 3. Explore AI applications across various business functions and industries.
- 4. Analyse the impact of AI on business models, processes and decision-making.
- 5. Develop critical thinking skills to evaluate ethical and legal implications of AI adoption.

Course Outcomes

Aligned with the learning outcomes, the course outcomes include:

- 1. To introduce the concepts and perspectives in Al
- 2. To apply the AI tools and technologies
- 3. To introduce the AI applications in Business
- 4. To introduce strategic integration of AI
- 5. To introduce the ethical and legal considerations of AI

Unit I

Introduction to Artificial Intelligence:

Overview of Artificial Intelligence: concepts and terminology, Foundations of Artificial Intelligence, History of Artificial Intelligence, Risks and Benefits of Artificial Intelligence.

Unit II

AI Tools and Technologies:

Introduction to popular AI tools, Overview of AI technologies, Artificial Intelligence driven innovations, Use of AI tools and technologies in business.

Unit III

AI Applications in Business:

Overview of Al Applications in Business: Al in marketing and customer analytics, Al in finance and investment analysis, Al in supply chain management and logistics, Al in human resources and talent management.

Unit IV

Strategic Integration of AI:

Understanding generative and other forms of AI, Organizational strategies to incorporate AI into their: products, processes and overall business strategies, Insight use of AI as a core element shaping business models and decision-making processes.

Unit V

Ethical and Legal Considerations:

Understand the ethical implications and societal impacts of AI technologies, considering biases, privacy and responsible AI development, Legal frameworks for AI adoption, Regulatory compliance and data protection laws.

Note: Teaching Pedagogy

- Teaching Pedagogy besides classroom teaching will essentially include simulation, case studies, role plays and games.
- ❖ Teaching-learning Process will involve input from those who have demonstrated excellence in the area i.e. Practioner's view will be incorporated.

Reference Books and Suggested Readings

- Ajay Agrawal, Joshua Gans, Avi Goldfarb, " Prediction Machines: The Simple Economics of Artificial Intelligence " HBR Press.
- J. Nilsson, "Artificial Intelligence: A new Synthesis", Elsevier Publishers.
- Nitin Mittal and Thomas H. Davenport, "All-in On Al: How Smart Companies Win Big with Artificial Intelligence", HBR Press.
- S. Russel and P. Norvig, "Artificial Intelligence A Modern Approach", Pearson Education.

Course Title:	Academic Report Writing	Contact Hrs/ Week:	4
Course Code:	UGBA0O013T	Credit:	4
Duration of Exam:	3 hours	Maximum Marks:	100

Course Objective

The course aims to enhance students' academic writing skills, enabling them to produce high-quality, well-structured, and clear academic reports. The focus is on developing essential skills in research paper writing, thesis preparation, summarization, academic reading, and the use of writing tools and techniques.

Learning Outcome

- 1. To understand the significance and characteristics of academic writing, focusing on its role in academia and research, and identify various types of academic reports.
- 2. To demonstrate the ability to structure academic reports effectively, ensuring clarity and coherence in each section and applying proper formatting and referencing styles.
- 3. To develop the skills necessary to write comprehensive theses and dissertations, integrating critical components like literature reviews, research methodologies, and data analysis.
- 4. To utilize advanced tools and techniques for academic writing, including word processing software, data visualization, and plagiarism detection tools, while adhering to ethical writing practices.
- 5. To create specialized reports, such as research and project proposals, and refine them through editing, proofreading, and the application of peer feedback for submission readiness.

Course Outcomes

By the end of the course, students will:

- 1. To understand the fundamentals of academic report writing and its importance.
- 2. To develop well-structured and coherent academic documents.
- 3. To use appropriate tools for writing, formatting, and presenting academic reports.
- 4. To demonstrate the ability to write specialized reports like research papers, theses, and proposals.
- 5. To apply feedback and peer review to improve their writing skills.

Unit 1: Introduction to Academic Report Writing

Importance of academic writing in academia and research. Characteristics of academic writing. Overview of academic and research activities and report writing. Types of Academic Reports: Research papers, case studies, theses, and project reports. Key Characteristics: Clarity, coherence, objectivity, and audience awareness.

Meneral

Unit 2: Structuring Academic Reports

General Structure of Report: Title, abstract, introduction, body, conclusion, and references. Developing Content for Each Section: Writing an engaging introduction. Presenting data in results and discussions. Drawing logical conclusions and future directions. Formatting and Referencing Common referencing styles: APA, MLA, and Chicago.

Unit 3: Thesis and Dissertation Writing

Structure of a Thesis or Dissertation: Key components: Title, abstract, introduction, literature review, methodology, results, discussions, conclusion, bibliography. Writing scope, aims, and objectives of the thesis. Designing research methodology and analyzing results. Data Presentation and Analysis: Using tables, figures, and graphs effectively. Writing clear, concise, and objective discussions of findings. Thesis Writing Process: Steps in writing and revising a thesis. The role of appendices and supplementary materials.

Unit 4: Tools and Techniques for Report Writing

Word Processing and Formatting: Introduction to MS Word, LaTeX, and other writing tools. Using styles, templates, and headers/footers for formatting. Data Visualization and Presentation: Creating effective charts and tables using Excel and Tableau. Plagiarism Detection and Citation Tools: Understanding plagiarism and ethical writing practices. Using tools like Turnitin, Grammarly, Zotero, and Mendeley.

Unit 5: Types of Specialized Reports

Writing research proposals, project proposals, and progress reports. Editing and Proofreading: Techniques for revising drafts. Identifying and correcting common grammatical and formatting errors. Finalizing reports and preparing them for submission. Peer Review and Feedback: Best practices for peer review and giving constructive feedback. Applying feedback to improve writing.

Teaching Learning Methodology: To achieve the objectives of this course, a variety of methods shall be employed to make the students understand the real essence of the course.

- Classroom Lectures using PowerPoint presentations.
- Case Study discussions.
- Peer Learning and Role Plays.
- Quizzes and Debates on relevant topics.
- Practical Writing Workshops.
- Project-Based Learning.

Reference Books and Suggested Readings

- A Step-by-Step Guide to Writing Academic Papers, by Anne Whitaker September 2009
- 2. On Writing a Thesis by C P Ravikumar, IETE Journal of Education, 2000

3. Microsoft Office 2016, by Joan Lambert and Curtis Frye, Microsoft Press, Washington 98052-6399.

- Bailey, S. (2004). Academic writing: A practical guide for students. New York: Routledge Falmer.
- Goodson, P. (2013). Becoming an academic writer. Los Angeles: Sage. Leki, I. (2012).
 Academic writing (South Asian edition). New Delhi.
- Reinking, J. A., & Osten, R. (2005). Strategies for successful writing (9th edition). New York: Prentice Hall.

Course Title:	Operations Research	Contact Hrs./Week;	1
Course Code:	UGBA0O016T	Credit:	4
Duration of Examination:	3 hours	Maximum Marks:	100

Course Objective

The course aims to equip students with the foundational principles and practical skills in operations research, focusing on optimizing managerial decision-making through various quantitative models. Students will learn to identify, formulate, and solve real-world problems using linear programming, transportation and assignment models, and gain insights into project management, game theory, and simulation techniques for strategic analysis and uncertainty management in business contexts.

Learning Outcomes

Upon successful completion of the course, students will be able to:

- Describe the nature and scope of operations research models for managerial decisions.
- Formulate and solve linear programming problems for optimizing resource allocation using graphical and simplex methods.
- Demonstrate the ability to solve transportation and assignment problems.
- Construct and analyze project networks, determine critical paths, and optimize project schedules and costs.
- Understand and apply game theory concept, and use simulation techniques to address complex business challenges.

Course Outcomes

Aligned with the learning outcomes, the course outcomes include:

- 1. Solve linear programming problems using appropriate techniques and optimization solvers, interpret the results obtained.
- 2. Recognize the importance and value of Operations Research and linear programming in solving practical problems in industry.
- 3. Interpret the transportation models' solutions and infer solutions to the real-world problems.
- 4. Recognize and solve game theory and assignment problems.
- 5. Gain knowledge of drawing project networks for quantitative analysis of projects

Course Contents

Unit-I: Introduction to Quantitative Decision-Making

Mathematical basis of Managerial decisions: Nature and Scope of Quantitative methods in management. Introduction to Operation Research models (Allocation Model, Inventory Model,

Waiting Line Model, Game Theory Model, Network Model, Simulation Model, Decision Analysis Model.)

Unit-II: Linear Programming Models

Linear programming: Formulation of problems by translating real-world managerial issues into linear programming (LP) models, Graphical method to solve linear programming problems, Simplex method to solve linear programming problems.

Unit-III: Allocation Models- Transportation and Assignment Problems

Transportation model: North West Corner Method, Least Cost Method, Vogel's Approximation Method, Stepping Stone method, MODI Method, Transshipment Problem.

Assignment Model: Hungarian Method.

Unit-IV: Project Management and Network Analysis

Network analysis: Network Construction, Project Evaluation and Review Technique and Critical Path Method, Analysis of Critical Path, Time-Cost trade off: Crashing, Analysis Planning and scheduling project costs, Controlling project costs.

Unit-V: Game Theory and Business Simulations

Introduction to Game theory: Two person zero sum game, Minimax Maximin Strategies, Saddle point and Mixed Strategies, Dominance Rule.

Simulation for business: Monte Carlo Method, Application of Simulation in Business Situations.

Teaching Learning Methodology

To achieve the objectives of this course, a variety of methods shall be employed to make the students understand the real essence of the course. Some of the major methods adopted are as follows:

- Classroom Lectures using power point presentations
- Industry based Case Study discussions
- Peer Learning i.e. Presentations by the students
- Quizzes and Debates on contemporary topics

Assessment Methods

Students would be assessed for their learnings out of this course on a continuous evaluation basis throughout the semester. Some of the major assessment methods used are as follows:

- Periodic Presentations/Assignments (Individual/Team) of the students
- Debates/Group Discussion/Quiz as per the nature of the topic
- Peer competition within the class by making different teams
- Mid Term Examinations
- End Term Examinations

Suggested Readings

• Quantitative Techniques in Management, Vohra, N.D, McGraw Hill, Publishing House.

Analysis

- Operations Research: An Introduction, Taha Hamdy, Pearson Publications.
- Operations Research: Concepts Problems and Solutions, Kapoor, V.K. Sultan Chand Publications.
- Introduction to Operations Research, Hiller Frederick & Gerald Lieberman, Tata McGraw Hill Publications.

 Operations Research and Management Science Handbook, A. Ravi Ravindran, Taylor & Francis Publishers.

Show

Course Title:	Operations and Materials Management	Contact Hrs/ Week:	4
Course Code:	UGBA0O017T	Credit:	4
Duration of Exam:	3 hours	Maximum Marks:	100

Course Objective

This course provides a comprehensive understanding of operations and materials management, its challenges, trends and strategic role. It develops skills in product and process innovation, facility planning, work study and materials management, including ethical purchasing and efficient handling. Students will also explore inventory management and emerging concepts like JIT, TQM, and Al in operations functional areas of management.

Learning Outcomes

Upon successful completion of the course, students will be able to:

- 1. To understand the scope, issues and recent trends in operations management and its role in strategic decision-making.
- 2. To develop the ability to plan, design and innovate products and processes, addressing lifecycle challenges and leveraging advanced design techniques.
- 3. To understand the factors influencing facility location and layout, along with the principles of work study.
- 4. To learn the functions and objectives of materials management, including ethical purchasing and efficient materials handling.
- 5. To understand inventory management processes and explore emerging concepts like JIT, TOM, and AI in operations.

Course Outcomes

Aligned with the learning outcomes, the course outcomes include:

- 1. Learners will be able to explain the significance of operations management in strategic planning and demonstrate knowledge of recent trends and forecasting methods.
- 2. Apply tools and techniques of product and process design to address real-world product development challenges.
- 3. Analyze and evaluate facility location decisions and propose optimized layout designs incorporating work study principles.
- 4. Develop a comprehensive materials management plan integrating ethical purchasing policies and effective handling techniques.
- 5. Implement inventory control techniques and assess the impact of emerging concepts like automation and quality management on operational efficiency.

Unit-I

Operations Management: Concept, nature and scope of operations management, issues in operations management, recent trends in operations management.

Strategic operations management: Strategy and strategic management, nature, process and its importance, role of operations management in strategic management, elements of operations strategy, Forecasting, its process and methods of forecasting.

alop.

Unit-II

Product planning and development: Product, typology of products, new product development process, the product life- cycle, challenges of product development.

Product Design: Product design, its importance, factors affecting product design, characteristics of good product design, stages in product design, tools and techniques of product design and development.

Process Design: Process and process planning, typology of processes, major process decisions, procedure for process planning and design, process reengineering.

UNIT-III

Facility Location: Plant location, location theories, factors affecting facility planning at global-macro & micro level, methods for evaluating location based decisions.

Facility Layout: Plant layout, factors affecting facility layout, basic principles, types of layout, layout design procedure.

Work Study: Importance and objectives of work study, relationship of time and motion study to work study, method study, motion study, work measurement.

UNIT-IV

Materials Management: Concept, importance and objectives, functions of materials management, materials planning, factors affecting materials planning,

Purchasing Management: Nature, importance, objectives, purchasing cycle, purchasing policies, ethics in purchasing.

Stores and Material Handling: Stores layout, stock verification, classification and codification, importance and scope of materials handling, materials handling equipments.

UNIT-V

Inventory Management: Concept and objectives, inventory management and control, factors affecting inventory management and control, process, inventory control techniques.

Emerging concepts in Operations Management: Just-in-time, Supply chain management, Enterprise resource planning, Quality control, Total quality management, Automation and Artificial Intelligence.

Note: Teaching Pedagogy

- Case studies: Use case studies to help students apply operations and materials management concepts to real-world situations. Case studies can be used to stimulate discussion and critical thinking, and can help students understand how operations and materials management are applied in practice.
- Simulation: Use production simulation to enable students to understand the process of manufacturing product and product designs.
- Group work: Group work can help students develop teamwork and communication skills, and can also facilitate the exchange of ideas and perspectives.
- Interactive lectures: Interactive lectures can help students develop critical thinking and problem-solving skills, and can also make the material more relevant and meaningful for students.
- Online resources: Use online resources, such as videos, podcasts, and articles, to supplement traditional lectures and provide students with additional learning resources.

Reference Books and Suggested Readings

- Adam, Jr. E. E., & Ebert, R. J. (2010). Production and Operations Management (5th ed.).
 New Delhi: Prentice Hall of India Pvt. Ltd.
- Aswathappa, K. & Bhat, K.S. (2024). Production and Operations Management (revised 3rd ed.). Mumbai: Himalaya Publishing House.
- Banerjee, B. (2009). Operations Management and Control (2nd ed.). New Delhi: S. Chand
 & Company Ltd.
- Chase, R. B., Shankar, R., & Jacobs, F. R. (2017). Operations and Supply Chain Management (14th ed.). New Delhi: McGraw Hill Education.
- G. Norman & Frazier Greg (2011), Operations Management, 9th Edition, Cengage Learning India Pvt. Ltd.
- Evans & Collier (2007), Operations Management: An Integrated Goods and Services Approach, 1st Indian Reprint 2007, Thomson Learning.
- Krajewski, L. J., Ritzman, L. P., & Malhotra, M. K. (2023). Operations Management: Processes and Supply Chains (14th ed.). Pearson Prentice Hall.
- Jain, K.C and Patidar, J. (2011) Purchasing and materials Management, S. Chand & Company Ltd., New Delhi.

atabe.

Signer