



DEPARTMENT OF MANAGEMENT SCIENCES
R.V.R. & J.C. COLLEGE OF ENGINEERING
(AUTONOMOUS)
 GUNTUR-522 019, ANDHRA PRADESH

COURSE STRUCTURE FOR BACHELOR OF BUSINESS ADMINISTRATION (BBA)
R24-REGULATIONS

Semester V [Third Year]

COURSE STRUCTURE

S.NO	COURSE CODE	SUBJECT CODE	COURSE TITLE	L	P	C	I	E	T	WH
1	CC	BB311	Business Law	4	-	4	30	70	100	4
2	CC	BB312	Organizational Behaviour	4	-	4	30	70	100	4
3	DSE	BB313	Discipline Specific Elective – I	4	-	4	30	70	100	4
4	DSE	BB314	Discipline Specific Elective – II	4	-	4	30	70	100	4
5	DSE*	BB351	Discipline Specific Elective (Audit Course)	4	-	0	100	-	100	4
6	SEC	BB352	Internship	-	-	4	30	70	100	-
	TOTAL			20	-	20	250	350	600	20

CC – Core Courses | **DSE** – Discipline Specific Elective | **SEC** – Skill Enhancement Course

L – Lecture | **P** – Practical | **C** – Credits | **WH** – Weekly Hours

I – Internal Assessment | **E** – End Examination | **T** – Total Marks



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Semester VI [Third Year]

COURSE STRUCTURE

S.NO	COURSE CODE	SUBJECT CODE	COURSE TITLE	L	P	C	I	E	T	WH
1	CC	BB321	Strategic Management	4	-	4	30	70	100	4
2	CC	BB322	Business Ethics and Values	4	-	4	30	70	100	4
3	DSE	BB323	Discipline Specific Elective – III	4	-	4	30	70	100	4
4	DSE	BB324	Discipline Specific Elective – IV	4	-	4	30	70	100	4
5	DSE*	BB361	Discipline Specific Elective (Audit Course)	4	-	-	100	-	100	4
6	SEC	BB362	Comprehensive Viva	-	-	4		100	100	-
	TOTAL			20	-	20	220	380	600	20

CC – Core Courses | **DSE** – Discipline Specific Elective | **SEC** – Skill Enhancement Course

L – Lecture | **P** – Practical | **C** – Credits | **WH** – Weekly Hours

I – Internal Assessment | **E** – End Examination | **T** – Total Marks

DISCIPLINE-SPECIFIC ELECTIVE COURSES IN III BBA

In the third year of the BBA programme, students are required to choose one specialization out of six specializations. Under the chosen specialization, two elective courses are offered in each semester.

HUMAN RESOURCE MANAGEMENT ELECTIVES (HREL)

Code No.	Subject Name	Code No.	Subject Name
HREL01	Dynamics Of Industrial Relations	HREL02	Training & Development
HREL03	Talent Management	HREL04	Employee Compensation And Welfare Management

FINANCIAL MANAGEMENT ELECTIVES (FMEL)

Code No.	Subject Name	Code No.	Subject Name
FMEL01	Financial Planning	FMEL02	Financial Markets and Services
FMEL03	Investment Analysis and Portfolio Management	FMEL04	Direct Taxation

MARKETING MANAGEMENT ELECTIVES (MMEL)

Code No.	Subject Name	Code No.	Subject Name
MMEL01	Consumer Behavior	MMEL02	Product Management
MMEL03	Digital Marketing	MMEL04	Marketing Research

LOGISTICS MANAGEMENT ELECTIVES (LMEL)

Code No.	Subject Name	Code No.	Subject Name
LMEL01	Introduction to Logistics Management	LMEL02	Procurement and Materials Management
LMEL03	Warehouse Management	LMEL04	International Logistics Management

ARTIFICIAL INTELLIGENCE & DATA SCIENCE(AIEL)

Code No.	Subject Name	Code No.	Subject Name
AIEL01	Introduction To Web Design (HTML & CSS)	AIEL02	AI In Business Management
AIEL03	Data And Visual Analytics in AI	AIEL04	Data Structures and Algorithms

BUSINESS ANALYTICS AND DATA MANAGEMENT (BAEL)

Code No.	Subject Name	Code No.	Subject Name
BAEL01	Web Designing	BAEL02	Data Mining
BAEL03	Big Data Analytics	BAEL04	Advanced Office Automation

DISCIPLINE-SPECIFIC ELECTIVE AUDIT COURSES IN III BBA

Each student is offered one Discipline Specific Elective audit course in V and VI semesters

HUMAN RESOURCE MANAGEMENT ELECTIVES (HRAC)

S No	Code No.	Subject Name
1	HRAC01	Personality Development
2	HRAC02	Stress Management

FINANCIAL MANAGEMENT ELECTIVES (FMAC)

S No	Code No.	Subject Name
1	FMAC01	Fundamentals of Investment
2	FMAC02	Personal Finance

MARKETING MANAGEMENT (MMAC)

S No	Code No.	Subject Name
1	MMAC01	Industrial Marketing
2	MMAC02	Agri marketing

LOGISTICS MANAGEMENT ELECTIVES (LMAC)

S No	Code No.	Subject Name
1	LMAC01	Entrepreneurship in Logistics
2	LMAC02	Warehouse safety practices

ARTIFICIAL INTELLIGENCE & DATA SCIENCE (AIAC)

S No	Code No.	Subject Name
1	AIAC01	Business Analytics and Data Visualization
2	AIAC02	AI Applications in Business Functions

BUSINESS ANALYTICS AND DATA MANAGEMENT (BAAC)

S No	Code No.	Subject Name
1	BAAC01	Power BI
2	BAAC02	System Analysis & Design

BACHELOR OF BUSINESS ADMINISTRATION (BBA)
R 24- REGULATIONS
SEMESTER V (Third Year) BBA SYLLABUS (w.e.f 2026-27)

BB311: BUSINESS LAW

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. To provide knowledge of the basic concepts and legal provisions of the Indian Contract Act, 1872.
2. To develop understanding of the principles and rules under the Sale of Goods Act, 1930.
3. To familiarize students with consumer rights and the provisions of the Consumer Protection Act, 1986.
4. To introduce the concepts of Intellectual Property Rights and Cyber Law including the Information Technology Act, 2000.

Course Outcomes:

After successful completion of the course, the students can

- 1: Understand the formation, performance, and breach of contracts under the Indian Contract Act.
- 2: Get the knowledge of the rights and duties of buyers and sellers under the Sale of Goods Act.
- 3: Understand consumer protection mechanisms and consumer redressal agencies.
- 4: Acquire awareness of IPR protection and legal aspects of cyber laws and digital transactions.

UNIT I: Indian Contract Act, 1872:

[CO1](12)

Introduction, Definition and Meaning of Contract, Essentials of a Contract, Types of Contracts, Capacity of Parties, Modes of Discharge of a Contract, Breach of Contract and Remedies for Breach of Contract.

UNIT II: Sale of Goods Act, 1930:

[CO2](12)

Introduction, Contract of Sale of Goods, Essentials of a Contract of Sale, Agreement to Sell, Rights and Duties of Buyer, Right of Unpaid Seller, Conditions and Warranties, Transfer of Property, Performance of Contract

UNIT III: Consumer Protection Act 2019:

[CO3](12)

Introduction, Consumer Rights, consumer dispute redressal mechanism, Procedure for grievance redressal mechanism, appeals under the Consumer protection Act, 2019, Procedure And settlement through Mediation.

UNIT IV: Intellectual Property Rights and Cyber Law:

[CO4](12)

Concept and scope of IPR, Patent Act, Rights of patentee and Infringement, Trademarks and Copyright, WTO-IPR framework. Information Technology Act, 2000: Meaning and salient features, Digital signature, E-governance, Cyber laws and penalties

Textbooks:

1. Kuchhal, M.C. and Vivek Kuchhal, 2013, Business Law, sixth edition, Vikas Publishing House, Delhi
2. Dransfield, Robert. 2003, Business Law Made Easy, Oxford: Nelson Thornes (Part of Oxford University Press).
3. Pillai, R.S.N. and V. Bhagavathy, 2009, Business Law, Sultan Chand Co & Ltd. New Delhi
4. Kapoor, N.D. 200, Elements of Mercantile Law, Sultan Chand Co & Ltd., New Delhi
5. Bansal, C.C. 2007, Business and Corporate Law, Excel Books, New Delhi

Reference Books:

1. R.K. Bangia, *Business Laws*, Allahabad Law Agency, 2022 – comprehensive reference for all units.
2. S.S. Gulshan, *Business Law*, Excel Books, 2022 – for practical examples and case studies.

Web References:

1. <https://www.indiacode.nic.in> – Official site for Indian statutes and Acts.
2. <https://www.wipo.int> – World Intellectual Property Organization portal for IPR resources.

BB312: ORGANIZATIONAL BEHAVIOUR

<u>L</u>	<u>P</u>	<u>C</u>	<u>INT</u>	<u>EXT</u>
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. To develop an understanding of the nature, scope, significance and key concepts of Organizational Behaviour
2. To understand perception, personality and their influence on individual behaviour in organizations.
3. To develop an understanding of group behaviour, group development, interpersonal relationships and motivation.
4. To understand organizational culture, climate, ethical practices and conflict management.

Course Outcomes:

After successful completion of the course, the students can

1. To explain the foundations of Organizational Behaviour and its relevance to organizations.
2. To analyze individual behaviour through perception and personality concepts.
3. To analyze group dynamics and apply motivational theories to improve performance.
4. To evaluate organizational culture and apply appropriate strategies for managing workplace conflicts.

UNIT I: Organizational Behaviour:

[CO1](12)

Meaning – Nature and Scope of Organizational Behaviour – Key Components – Significance of OB – Contributing Disciplines – Challenges and Opportunities in OB .

UNIT II: Individual Behaviour:

[CO2](12)

Perception – Process, Factors Influencing Perception – Barriers In Perceptual Accuracy – Enhancing Perceptual Skills – Personality Traits – Determinants of Personality – Stages of Personality Development .

UNIT III: Group Dynamics and Motivation:

[CO3](12)

Determinants of Group Behaviour – Types of Groups – Group Formation and Development – Transactional Analysis – Johari Window – Motivation – Theories of Motivation: Maslow's Need Hierarchy Theory, Herzberg's Two-Factor Theory and McGregor's Theory X and Theory Y.

UNIT IV: Organizational Culture:

[CO4](12)

Organizational Culture and Climate – Creating an Ethical Organizational Culture – Conflict: Meaning – Conflict at Individual, Group and Organizational Levels – Sources of Conflict – Conflict Management Strategies.

TextBooks:

1. Fred Luthans, Organizational Behavior, Tata McGraw Hill.
2. Stephen P. Robbins, Organizational Behavior, Pearson Education, New Delhi, 2006.
3. Aswathappa. K., Organizational Behavior, Himalaya Publishing House, New Delhi.
4. Donald R. Brown & Don Harvey, An Experimental Approach to Organizational Development, Pearson Education.

Reference Books:

1. Pareek, U., Understanding Organizational Behaviour, Oxford University Press, 2021 – focuses on Indian organizational context, including perception, group dynamics, and change management.
2. Hersey, P., Blanchard, K.H., & Johnson, D.E., Management of Organizational Behavior: Leading Human Resources, Pearson, 2022 – emphasizes leadership, culture, and managing organizational change.

WebReferences:

1. <https://www.managementstudyguide.com/organizational-behavior.htm> – Practical notes, models, and case studies on OB concepts.
2. <https://www.tutor2u.net/business/reference/organizational-behaviour> – Articles and examples covering perception, personality, group dynamics, culture, and change management.

HR SPECIALIZATION ELECTIVE PAPERS
BB313 (HREL01): DYNAMICS OF INDUSTRIAL RELATIONS

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. To understand basic concepts, stakeholders, and theoretical approaches of industrial relations.
2. To evaluate role of trade unions and collective bargaining in maintaining industrial peace.
3. To identify causes of industrial disputes and methods to manage and resolve conflicts effectively.
4. To understand legal framework and modern practices guiding industrial relations.

Course Outcomes:

After successful completion of the course, the students can

1. Explain the key concepts & theories involved in industrial relations and identifying their roles.
2. Analyze trade union structures and apply collective bargaining strategies to workplace scenarios.
3. Identify sources of conflict and appropriate dispute resolution methods to maintain industrial harmony.
4. Apply labour laws and IR best practices to develop compliant and productive workplace environments.

UNIT I: Introduction to Industrial Relations:

[CO1](12)

Meaning, objectives, and scope of industrial relations (IR), Factors affecting IR: economic, social, and organizational, Approaches to IR: unitarist, pluralist, and Marxist perspectives, Stakeholders in IR: employers, employees, trade unions, government

UNIT II: Trade Unions and Collective Bargaining:

[CO2](12)

Concept and functions of trade unions, Evolution of trade union movement in India, Collective bargaining: meaning, importance, and process, Types and strategies of collective bargaining.

UNIT III: Industrial Disputes and Conflict Management:

[CO3](12)

Meaning, causes, and types of industrial disputes, Conflict management strategies, Industrial grievances: handling mechanisms and procedures, Machinery for dispute resolution in India: labour courts, tribunals, conciliation, arbitration.

UNIT IV: Labour Legislation and Industrial Relations Practices:

[CO4](12)

Overview of key labour laws: Industrial Disputes Act, Trade Unions Act, Factories Act, Employee welfare and social security legislations, Emerging trends in industrial relations: globalization, HR practices, technology impact.

Text Books

1. Industrial Relations: Trade Unions and Labour Legislation – P.R.N. Sinha, InduBala Sinha & Seema Priyadarshini.
2. Dynamics of Industrial Relations – C.B. Mamoria & Satish Mamoria.
3. Industrial Relations and Labour Laws – S.C. Srivastava.
4. Personnel Management and Industrial Relations – K. Aswathappa.
5. Industrial Relations in India – V.B. Singh.

Reference Books

1. Industrial Relations in India: Issues and Perspectives – Nirmal Singh
2. Human Resource Management – Gary Dessler
3. Human Resource Management – P. Subba Rao
4. Industrial Relations – John T. Dunlop
5. Labour and Industrial Laws – P.L. Malik

Web References

1. Ministry of Labour and Employment – <https://labour.gov.in>
2. International Labour Organization – <https://www.ilo.org>
3. National Portal of India – <https://www.india.gov.in>
4. Vikaspedia – <https://vikaspedia.in>

Course Objectives:

1. To understand fundamental concepts, importance, and objectives of training and development in organizations.
2. To evaluate organizational and individual training needs and explore appropriate training methods.
3. To identify skills for designing, implementing, and evaluating training programs effectively.
4. To understand methods of evaluating training effectiveness and explore emerging trends in the field.

Course Outcomes:**After successful completion of the course, the students can**

1. Explain the role and significance of training and development in enhancing organizational performance.
2. Assess training needs and select suitable training methods for employees.
3. Design a training program with clear objectives, content, methods, and implementation plan.
4. Evaluate training effectiveness and adapt to modern training practices like e-learning and gamification.

UNIT I: Introduction to Training and Development:**[CO1](12)**

Meaning and scope of Training and Development, Importance and objectives of training, Types of training: On-the-job and Off-the-job training, Differences between training, education, and development.

UNIT II: Training Needs and Methods:**[CO2](12)**

Training Needs Assessment (TNA), Job analysis and performance appraisal, Methods of training: Lectures, simulations, role plays, case studies, e-learning, Designing effective training programs.

UNIT III: Training Design and Implementation:**[CO3](12)**

Training design process, Setting training objectives, Curriculum development, Training implementation strategies, Role of trainers and trainees.

UNIT IV: Evaluation and Emerging Trends in Training:**[CO4](12)**

Evaluation of training programs (Kirkpatrick's model), ROI of training, Emerging trends: E-learning, online modules, gamification, AI in training, Challenges in training and development.

Text Books

1. Employee Training and Development–Raymond A.Noë
2. Training and Development– P.SubbaRao
3. Training and Development:Theory and Practice –Rolf P. Lynton &Udai Pareek
4. Human Resource Management–K. Aswathappa
5. Effective Training: Systems, Strategies and Practices –P.Nick Blanchard &JamesW. Thacker

Reference Books

1. Human Resource Management – Gary Dessler
2. Strategic Human Resource Management –JeffreyA. Mello
3. Learning and Development–Randy L.Desimone
4. Human Resource Development– Jon M.Werner&RandyL. Desimone
5. The Adult Learner–MalcolmS. Knowles

Web References

1. Society for Human Resource Management– <https://www.shrm.org>
2. International Labour Organization–<https://www.ilo.org>
3. National Programme onTechnology Enhanced Learning –<https://nptel.ac.in>
4. Linked In Learning–<https://www.linkedin.com/learning>
5. Ministry of Skill Development and Entrepreneurship– <https://www.msde.gov.in>

FINANCE SPECIALIZATION ELECTIVE PAPERS
BB313 (FMEL01): FINANCIAL PLANNING

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. Analyze the impact of socio-economic and political factors on goal-based financial planning.
2. Understand fundamental concepts, importance, and steps of the financial planning process.
3. Evaluate various investment products and assess their risk-return characteristics.
4. Understand retirement savings importance and develop retirement planning strategies.

Course Outcomes:

After successful completion of the course, the students can

1. Describe the financial planning process and its steps.
2. Apply risk assessment concepts to develop suitable insurance plans.
3. Compare retirement schemes based on individual financial positions and future goals.
4. Assess investment choices to formulate goal-based financial strategies.

UNIT I: Introduction to Financial Planning:

[CO1] (12)

Social, political and economic environment analysis; assessment of psychological and financial needs; identifying and classifying financial goals; concept of saving and financial discipline. Definition, scope and steps of financial planning; budgeting, cash flow and debt management. Risk-return analysis; Time Value of Money; components of a financial plan. Life Cycle approach — Five Personalities and Five-Way Classification Model; assessing individual risk-taking capacity.

UNIT II: Investment Planning:

[CO2] (12)

Investment vs. speculation vs. gambling; objectives and principles of investing. Risk-return measurement; key investment avenues—Stocks, Bonds, Mutual Funds, Gold/Silver, Real Estate, ETFs, Commodities, Banking Products, ULIPs and overseas options. Portfolio diversification and goal mapping. Types of credit; cost and management of debt; CIBIL Score and signs of over-indebtedness.

UNIT III: Retirement Planning:

[CO3] (12)

Principles, stages and steps in retirement planning. Retirement schemes: EPF, PPF, Superannuation Fund, Gratuity, NPS, Old Pension Scheme. Tax planning — Section 80C and related deductions; linkage of tax and retirement planning. Cultural perspectives on retirement planning.

UNIT IV: Insurance and Estate Planning:

[CO4] (12)

Risk management and insurance planning; role of insurance companies; strategic insurance solutions. Estate planning: terminology, process, wealth distribution goals and strategies. Practical: Prepare a financial plan for a person/entrepreneur/corporate executive considering current expenses, future family needs, retirement age, contingency funds and TVM.

Text Books:

1. Gitman, L.J. & Joehnk, M.D. — Personal Financial Planning. South-Western Cengage.
2. Keown, A. J. — Personal Finance: Turning Money in to Wealth. Pearson.
3. Kapoor, J.R. et al. — Focus on Personal Finance. McGraw-Hill.
4. Sullivan, M.K. — Financial Planning: A Practical Approach. Wiley.
5. Madura, J. — Personal Finance. Pearson.

Reference Books:

1. Lee, C.F. & Lee, J. — Financial Analysis, Planning and Forecasting. World Scientific.
2. IIBF — Investment Planning, Tax Planning and Estate Planning. Taxmann.
3. IIBF — Introduction to Financial Planning. Taxmann

Web References:

1. <https://www.nism.ac.in>
2. <https://www.iepfa.gov.in>

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. Understand the role and importance of financial markets in the economy.
2. Analyze various financial products and their characteristics.
3. Evaluate the role of financial intermediaries and services in the financial system.
4. Apply knowledge of financial products to real-world financial decision-making.

Course Outcomes:

After successful completion of the course, the students can

1. Define key terms: lease, hire-purchase, factoring, forfeiting, bill of exchange, mutual funds and credit rating.
2. Explain leasing arrangements, hire-purchase stages and the role of credit rating agencies.
3. Evaluate factoring vs. forfeiting for receivables management and recommend suitable options.
4. Analyze mutual fund types and evaluate their performance metrics.

Course Content:

UNIT I: Financial System and Markets :**[CO1](12)**

Financial system—need, structure, functions and scope. Financial inter mediation; fund-based and fee-based products. Money Market: Instruments — T-Bills, Commercial Papers, CDs, Call Money, MMFs, Commercial Bills; trading mechanisms. Capital Market: Primary and Secondary markets; methods of floatation — IPO, Book Building, Private Placement, Rights/Bonus Issue; investor protection; SEBI roles. Stock Exchanges (NSE/BSE); index methods; trading systems (BOLT/NEAT); T+2 settlement cycle; circuit breakers; demat and physical settlement.

UNIT II: Leasing and Hire Purchase:**[CO2](12)**

Leasing—types, features, advantages/disadvantages, key lease clauses; buy-vs-lease decision (tax and depreciation); evaluation from lessee and lessor perspectives; major leasing institutions. Hire Purchase — concepts, features, evaluation with tax implications; comparison with leasing and installment purchase.

UNIT III: Mutual Funds, Credit Rating and Securitization:**[CO3](12)**

Mutual Funds—types, advantages/disadvantages; structure (Trustee, Sponsor, AMC, Custodian); NAV, entry/exit loads; SIP and SWP; Indian MF regulations. Credit Rating — process, methodology, rating agencies; rating symbols; advantages/disadvantages.

UNIT IV: Factoring, Forfeiting and Bill Discounting:**[CO4] (12)**

Factoring — types (with/without recourse; domestic/international); single and direct factor systems; fees (finance charge, service fee); advantages/disadvantages. Bill Discounting — types and importance; comparison with factoring. Forfeiting — mechanism, fees (discount and commitment); advantages/disadvantages; differences from factoring. Numericals: Leasing, Hire Purchase, Factoring, Forfeiting, Bill Discounting and NAV calculations.

Text Books:

1. Kohn, M.—Financial Institutions and Markets. Tata McGraw-Hill.
2. Fabozzi, F.J. & Modigliani, F.—Foundations of Financial Markets and Institutions. Pearson.
3. Khan, M. Y.—Financial Services. Tata McGraw-Hill.
4. Khan, M. Y.—Indian Financial System. Tata McGraw-Hill.

Reference Books:

1. Machiraju, H. R.—Indian Financial Systems. Vikas Publishing.
2. Pathak, B.—Indian Financial Systems. Pearson.

Web References:

1. <https://www.sebi.gov.in>
2. <https://www.nseindia.com>

MARKETING SPECIALIZATION ELECTIVE PAPERS
BB313(MMEL01): CONSUMER BEHAVIOUR

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. To understand the basic concepts and importance of consumer behaviour.
2. To study the factors such as motivation, and personality influencing consumers.
3. To examine social and cultural influences on consumer behaviour.
4. To understand the consumer decision making process and behaviour models.

Course Outcomes:

After successful completion of the course, the students

1. Explain the concepts and importance of consumer behaviour in marketing.
2. Describe the influence of motivation, personality, and social class on consumers.
3. Analyse the impact of culture, family and reference groups on consumer behaviour.
4. Examine the consumer decision making process and consumer behaviour models.

UNIT I: Introduction:

[CO1] (12)

The application of consumer behaviour principles to strategic marketing, Consumer Research, Consumer needs and motivation, Personality and consumer behaviour, Market segmentation and consumer behaviour, Consumers Psychographics, Constructing a Psychographic inventory, application of psychographic analysis

UNIT II: Consumer Attitudes and Social Class:

[CO2] (12)

The nature of consumer's attitude; structural models of attitudes; measurement of attitudes; components of attitudes; attitude formation and attitude change; social class and consumer behaviour; the measurement of social class; life style profiles of the social classes

UNIT III: Cultural and Personal Influences:

[CO3] (12)

The influence of culture on consumer behaviour, characteristics of culture, the measurement of culture, subculture and consumer behaviour, reference groups and consumer behaviour, family influence on consumer behaviour, personal influence and the opinion leadership process; measurement of opinion leadership.

UNIT IV: Consumer Decision making:

[CO4] (12)

Four view of consumer - Economic man, Passive Man, Cognitive Man, Emotional Man, Consumer Decision Process, Comprehensive Models of Consumer Decision Making; Nicosia Models, Howard - Sheth Model, Engel - Kollat - Blackwell Model.

Text Books:

1. Consumer Behavior – Leon G. Schiffman and Joseph L. Wisenblit, 12th Edition, Pearson, 2018.
2. Consumer Behavior: Buying, Having, and Being – Michael R. Solomon, 13th Edition, Pearson, 2019.
3. Consumer Behaviour: Insights from Indian Market – RamanujMajumdar, Standard/Revised Edition, April 2025.
4. Consumer Behaviour and Marketing Research – Suja R. Nair, 2nd Edition, Himalaya Publishing House, 2024.

Reference Books:

1. Consumer Behavior – Roger D. Blackwell, Paul W. Miniard and James F. Engel, Cengage Learning.
2. Consumer Behavior: Concepts and Applications – David L. Loudon and Albert J. Della Bitta, McGraw Hill Education.

Web References:

1. <https://www.ama.org>
2. <https://www.marketing91.com>

Course Objectives:

1. To introduce basic concepts of products and product classification.
2. To develop understanding of new product development and design.
3. To explain product development, test marketing, and product launching.
4. To understand Product Life Cycle and related strategies.

Course Outcomes:

After successful completion of the course, the students

1. Identify fundamental product concepts, classifications, and product decisions.
2. Explain the complete process of new product development.
3. Analyse product development and product market introduction stages.
4. Examine Product Life Cycle stages and related management strategies.

UNIT I: Product Concepts and Classification:**[CO1] (12)**

Product concept – Meaning and importance of product – Product classification – Product vs. Service – Levels of product – Product line decisions – Product mix decisions – Product differentiation – Product modification – Product elimination – Role and responsibilities of product managers.

UNIT II: New Product Development:**[CO2] (12)**

Meaning and need for new product development – Risks and uncertainty in new product development – New product development process – Generation of ideas – Idea screening – Concept development and testing – Designing a new product: factors to be considered – Standardization vs. Adaptation vs. Differentiation – Classification of new products.

UNIT III: Product Development and Market Introduction:**[CO3] (12)**

Marketing strategy development – Business analysis – Product development – Test marketing – Commercialization – Product launching – Success and failures in product launches – New product success and failures in the Indian context.

UNIT IV: Product Life Cycle and Product Strategy:**[CO4] (12)**

Product Life Cycle (PLC) – Phases of PLC and features – Functional management strategies for different phases of PLC – Product portfolio strategy – Product policy – New product development policy – Product line consistency – Frequency of product launches – Launch timing – Issues in product introduction.

Text Books:

1. Lehmann, Donald R. and Winer, Russell S., *Product Management*, 4th Edition, McGraw Hill Education, New Delhi, 2017.
2. Majumdar, Ramanuj, *Product Management in India*, 3rd Edition, PHI Learning, New Delhi, 2007.

Reference Books:

1. Mukherjee, Kaushik, *Product Management: Text and Cases*, 1st Edition, PHI Learning, New Delhi, 2009.
2. Crawford, C. Merle and Di Benedetto, Anthony, *New Products Management*, 12th Edition, McGraw Hill Education, New Delhi, 2025.

Web References:

1. <https://www.pdma.org>
2. <https://hbr.org/topics/product-management>

LOGISTICS SPECIALIZATION ELECTIVE PAPERS
BB313 (LMEL01): INTRODUCTION TO LOGISTICS MANAGEMENT

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. To introduce the fundamental concepts of logistics management in modern business.
2. To understand the role of logistics in supply chain efficiency and customer satisfaction.
3. To explain the major logistics activities such as transportation and warehousing
4. To familiarize students with logistics infrastructure and information systems.

Course Outcomes:

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

1. Understand the basic concepts and evolution of logistics management.
2. Identify the key logistics activities and their importance in business operations.
3. Analyze transportation systems and logistics networks.
4. Explain the role of technology in logistics operations.

UNIT I: Basics of Logistics:

[CO1] (12)

Meaning and Definition of Logistics – Evolution and Development of Logistics – Objectives and Importance of Logistics – Logistics and Supply Chain Management – Components of Logistics – Relationship between Logistics, Marketing, and Production.

UNIT II: Logistics Infrastructure:

[CO2] (12)

Transportation Infrastructure – Modes of Transportation (Road, Rail, Air, and Sea) – Advantages and Limitations of Each Mode – Role of Logistics Service Providers – Logistics Hubs and Distribution Networks.

UNIT III: Inventory and Distribution Management:

[CO3] (12)

Concept of Inventory Management – Types of Inventory – Inventory Control Techniques – Distribution Channels and Distribution Systems – Distribution Centers and Warehouses – Reverse Logistics and Product Returns.

UNIT IV: Logistics Information Systems:

[CO4] (12)

Importance of Information Technology in Logistics – Logistics Information Systems – Electronic Data Interchange (EDI) – Enterprise Resource Planning (ERP) Systems – GPS and Tracking Systems.

Text Books:

1. Logistics and Supply Chain Management – Martin Christopher, Pearson.
2. Business Logistics Management – Ronald Ballou, Pearson.
3. Logistics Management – Ismail Reji, Excel Books.
4. Supply Chain Management – Sunil Chopra and Peter Meindl, Pearson.

Reference Books:

1. Bowersox, Donald J., Closs, David J., Cooper, M. Bixby, & Bowersox, John C. – Supply Chain Logistics Management, 5th Edition, McGraw Hill Education.
2. Rushton, Alan, Croucher, Phil & Baker, Peter – The Handbook of Logistics and Distribution Management, 7th Edition, Kogan Page.

Web References:

1. <https://www.logisticsmgmt.com>
2. <https://www.inboundlogistics.com>
3. <https://www.supplychaindigital.com>
4. <https://www.cscmp.org>

BB314 (LMEL02): PROCUREMENT AND MATERIALS MANAGEMENT

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. To understand the concepts of procurement and materials management.
2. To explain purchasing procedures and supplier management.
3. To study materials planning and inventory control systems.
4. To analyze procurement strategies and sourcing decisions.

Course Outcomes:

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

1. Understand the functions and importance of materials management.
2. Explain procurement processes and purchasing strategies.
3. Analyze inventory control and materials planning techniques.
4. Evaluate supplier selection and vendor management systems.

UNIT I: Introduction to Materials Management:

[CO1](12)

Concept and Scope of Materials Management – Importance and Objectives – Functions of Materials Management – Integrated Materials Management – Relationship with Production and Logistics.

UNIT II: Purchasing and Procurement:

[CO2](12)

Purchasing Concepts – Procurement Planning – Purchasing Procedures – Supplier Identification – Vendor Selection – Negotiation and Contract Management – Ethical Issues in Procurement.

UNIT III: Inventory Management:

[CO3](12)

Concept and Importance of Inventory – Types of Inventory – Inventory Control Techniques – Economic Order Quantity (EOQ) – ABC Analysis – Safety Stock – Just-In-Time (JIT) Inventory System.

UNIT IV: Vendor Management:

[CO4] (12)

Supplier Evaluation Methods – Vendor Rating Systems – Supplier Relationship Management – Strategic Sourcing – Performance Measurement of Suppliers.

Text Books:

1. Purchasing and Materials Management – P. Gopalakrishnan, McGraw Hill.
2. Materials Management – K.K. Chitale and R.C. Gupta.
3. Supply Chain Management – Sunil Chopra and Peter Meindl.
4. Purchasing and Supply Chain Management – Robert M. Monczka.

Reference Books:

1. Baily, P., Farmer, D., Jessop, D., & Jones, D. – Procurement Principles and Management, 12th Edition, Pearson Education.
2. Dobler, D. W. & Burt, D. N. – World Class Supply Management: The Key to Supply Chain Management, 8th Edition, McGraw Hill Education.

Web References:

1. <https://www.cips.org>
2. <https://www.supplychaindigital.com>
3. <https://www.inboundlogistics.com>
4. <https://www.logisticsmgmt.com>

ARTTIFICIAL INTELLIGENCE SPECIALIZATION ELECTIVE PAPERS

BB313 (AIEL01): INTRODUCTION TO WEBDESIGN (HTML&CSS)

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. Understand the fundamental principles of web design, including planning design concepts.
2. To introduce students to HTML structure, elements, and basic mark-up tags.
3. To teach the concepts of CSS for styling HTML elements, including text and tables.
4. To develop skills in advanced CSS techniques such as grouping, positioning, pseudo-classes, navigation bars, and creating responsive layouts.

Course Outcomes:

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

1. Design visually appealing, user-friendly home pages and navigation layouts.
2. Create functional HTML pages with headings, paragraphs, lists, tables, hyper links and forms.
3. Apply CSS to format and style web pages effectively, controlling layout, fonts.
4. Implement advanced styling and responsive design features to create professional and interactive web pages.

UNITI: Web Design Principles:

[CO1] (12)

Basic principles involved in developing a web site, Planning process, Five Golden rules of web designing, Designing navigation bar, Page design, Home Page Layout, Design Concept.

Basics in Web Design: Brief History of Internet, What is World Wide Web, Why create a web site, Web Standards, Audience requirement.

UNIT II: Introduction to HTML:

[CO2] (12)

What is HTML, HTML Documents, Basic structure of an HTML document, creating an HTML document, Mark up Tags, Heading-Paragraphs, Line Breaks, and HTML Tags.

Elements of HTML: Introduction to elements of HTML, Working with Text, Working with Lists, Tables and Frames, Working with Hyperlinks, Images and Multimedia, Working with Forms and controls.

UNITIII: Cascading Style Sheets:

[CO3] (12)

Concept of CSS , Creating Style Sheet , CSS Properties, CSS Styling(Background, Text Format, Controlling Fonts), Working with block elements and objects, Working with Lists and Table, CSS Id and Class, Box Model(Introduction, Border properties, Padding Properties, Margin properties)

UNIT IV: CSS Advanced:

[CO4] (12)

Grouping, Dimension, Display, Positioning, Floating, Align, Pseudo class, Navigation Bar, Image Sprites, Attribute selector, CSS Color, Creating page Layout and Site Designs.

Text Books:

1. Kogent Learning Solutions Inc. HTML 5 in simple steps Dreamtech Press A beginner's guide to HTML NCSA,14th May,2003.
2. Murray,Tom/Lynchburg Creating a Web Page and Web Site College,2002.

Reference Books:

1. Web Designing & Architecture-Educational Technology Centre University of Buffalo. Steven M. Schafer HTML, XHTML, and CSS Bible, 5ed Wiley India .
2. John Duckett Beginning HTML, XHTML, CSS, and JavaScript Wiley India.

Web References:

1. <https://www.w3schools.com/html>
2. <https://www.w3schools.com/css>
3. <https://www.tutorialspoint.com/html/index.htm>

Course Objectives:

1. To introduce the fundamental concepts of AI, its history, current state, and the principles of designing intelligent agents.
2. To develop an understanding of search algorithms and problem-solving techniques used in AI, including uninformed and informed (heuristic) strategies.
3. To teach modeling of constraint satisfaction problems (CSPs) and strategies for adversarial search and decision-making in competitive environments.
4. To introduce logic-based AI, knowledge representation, propositional logic, and theorem proving techniques for reasoning agents.

Course Outcomes:

After successful completion of the course, the students are able to

1. Explain AI foundations, the concept of rational agents, and differentiate types of environments and agent architectures
2. Implement and analyze search algorithms to solve structured and complex problems efficiently.
3. Formulate CSPs, apply backtracking and constraint propagation, and perform game-based decision-making using alpha-beta pruning.
4. Design knowledge-based agents, represent knowledge logically, and perform inference using propositional logic.

UNIT I: Introduction:**[CO1] (12)**

What Is AI? The Foundations of AI, the History of AI, the State of the Art. **Intelligent Agents:** Agents and Environments, Good Behavior: The Concept of Rationality, The Nature of Environments, The Structure of Agents.

UNIT II: Solving Problems by Searching:**[CO2] (12)**

Problem-Solving Agents, Search Algorithms, Uninformed Search Strategies. Informed (Heuristic) Search Strategies, Heuristic Functions.

Search in Complex Environments: Local Search and Optimization Problems, Search with Non-Deterministic Actions, Online Search Agents and Unknown Environments.

UNIT III: Constraint Satisfaction Problems:**[CO3] (12)**

Defining Constraint Satisfaction Problems, Constraint Propagation: Inference in CSPs, Backtracking Search for CSPs.

Adversarial Search and Games: Game Theory, Optimal Decisions in Games, Heuristic Alpha-Beta Tree Search.

UNIT IV: Logical Agents:**[CO4] (12)**

Knowledge-Based Agents, The Wumpus World, Logic, Propositional Logic, Propositional Theorem Proving.

Text Books:

Artificial Intelligence-A Modern Approach, Stuart Russell and Peter Norvig, Fourth Edition, Pearson Education

Reference Books:

1. Artificial Intelligence, E. Richard K. Knight, 3rd Edn., (TMH)
2. Artificial Intelligence, 3rd Edn., Patrick Henry Winston, 3rd Edn., Pearson Education.
3. A First Course in Artificial Intelligence, Deepak Khemani, Tata Mc-Graw Hill.

Web References:

1. <https://ai.stanford.edu>
2. <https://www.aaai.org>
3. <https://www.geeksforgeeks.org/search-algorithms-in-artificial-intelligence/>

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. To introduce the fundamentals of the Internet and the history of the web.
2. To construct basic Websites using HTML and cascading style sheets.
3. To develop the ability to logically plan and develop web pages.
4. To learn to write, test and debug web pages using HTML and JavaScript.

Course Outcomes:

At the end of this course, the students will be able to

1. Describe the concepts of the World Wide Web, and the requirements of effective web design.
2. Develop web pages using the HTML and CSS features with different layouts as per the need of applications.
3. Support the development of web pages.
4. Write scripts using JavaScript on a web page

UNITI: Web Fundamentals:**[CO1] (12)**

Introduction to the Web, History of the Web, Protocols Governing the Web, Creating Websites for Individuals and the Corporate World, Web Applications.

UNITII: Hyper Text Transfer Protocol (HTTP):**[CO2] (12)**

Introduction - Web Server and Clients, Resources, URL and its Anatomy – Examples, Message Format, Persistent and Non-Persistent Connections, Web Caching, Proxy.

UNITIII: Hyper Text Markup Language (HTML):**[CO3](12)**

Introduction, Structure, Text, Lists, Links, Images, Tables, Forms, Frames, Images, and Meta Tags.

UNITIV: Cascading Style Sheets (CSS):**[CO4](12)**

Introduction, Advantages, Color, Text, Boxes, Lists, Tables and Forms, Layout, Images.

Text Books:

1. HTML and CSS: Design and Build Websites – Jon Duckett
2. Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript – Jennifer Niederst
3. HTML, CSS, and JavaScript All in One, Sams Teach Yourself – Julie Meloni& Jennifer Kyrnin
4. Web Design with HTML, CSS, JavaScript and jQuery Set – Jon Duckett — Combines foundational topics including scripting and styling for modern websites.

Reference Books:

1. Head First HTML and CSS – Elisabeth Robson & Eric Freeman
2. Murach's HTML5 and CSS3: Training & Reference – Anne Boehm & Zak Ruvalcaba

Web References:

1. <https://developer.mozilla.org/en-US/docs/Web/HTML>
2. <https://developer.mozilla.org/en-US/docs/Web/CSS>
3. <https://developer.mozilla.org/en-US/docs/Web/JavaScript>

Course Objectives:

To understand the Data Mining techniques and general data features.

1. Understand the concepts of Data Mining and Business Analytics.
2. Perform basic data preparation and preprocessing.
3. Apply fundamental data mining techniques to business problems.
4. Interpret mining results for managerial decision-making.

Course Outcomes:

At the end of this course, the students will be able to

1. Explain data mining concepts and business applications.
2. Prepare and preprocess data for analysis.
3. Apply basic data mining techniques to solve business problems.
4. Interpret mining results for managerial decision-making.

UNIT-I Introduction to Data Mining:**[CO1] (12)**

What Is Data Mining, Evolution of Data Mining, Data vs Information vs Knowledge, Business Intelligence (BI), Data Mining vs Database Systems, Data Mining vs Data Warehousing, KDD (Knowledge Discovery in Databases) Process, Types of Data, Data Sources, Applications of Data Mining.

UNIT-II Data Preparation and Data Warehousing:**[CO2] (12)**

Data Collection, Data Integration, Data Cleaning, Handling Missing Values, Data Transformation, Data Reduction, Data Quality – Accuracy, Completeness, Consistency & Timeliness, Introduction to Data Warehousing, Data Warehouse Architecture, ETL Process, OLTP vs OLAP, Data Marts.

UNIT-III Data Mining Techniques:**[CO3] (12)**

Classification – Concept & Business Applications, Clustering - Concept & Customer Segmentation, Association Rule Mining - Market Basket Analysis, Prediction - Sales Forecasting & Customer Behaviour Prediction, Outlier Detection - Fraud Detection, Introduction to Text Mining and Web Mining, Business case studies.

UNIT-IV Business Applications and Emerging Trends:**[CO4] (12)**

Business Applications - Customer Relationship Management (CRM), Customer Lifetime Value, Cross Selling, Up Selling, Churn Prediction, Recommendation Systems, Ethical Issues, Emerging Trends - Big Data, Cloud Analytics, AI, Gen AI & ML in Business, Predictive Analytics.

Text Books:

1. Introduction to Data Mining, Pearson Education. By Pang-Ning Tan, Michael Steinbach & Vipin Kumar.

2. Data Mining: Concepts and Techniques, Morgan Kaufmann.. By Jiawei Han, Micheline Kamber & Jian Pei.

Reference Books:

1. Introduction to Data Mining and Its Applications, Springer.S. Sumathi& S. N. Sivanandam,
2. Business Intelligence: The Savvy Manager's Guide, Morgan Kaufmann. David Loshin.

Web References:

1. <https://www.ibm.com/think/topics/data-mining>
2. <https://www.kdnuggets.com>
3. <http://nptel.ac.in/courses/110106064/>

SEMESTER VI (Third Year) BBA SYLLABUS (w.e.f 2026-27)
BB321: STRATEGIC MANAGEMENT

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. To understand the concept, importance, and process of strategic management in modern organizations.
2. To analyze the internal and external business environment influencing strategic decisions.
3. To develop knowledge about strategy formulation and implementation in organizations.
4. To examine the role of strategic leadership and evaluation in achieving organizational goals.

Course Outcomes:

1. Identify the fundamental concepts, levels, and processes of strategic management.
2. Analyze internal and external environmental factors affecting organizational strategies.
3. Apply appropriate strategies for formulation and implementation in business organizations.
4. Evaluate the effectiveness of strategic leadership and strategic control in organizational performance

UNIT I: Introduction to Strategic Management:

[CO1](12)

Concept of Strategy – Meaning and definition of Strategic Management – Significance of Strategic Management – Strategic Management Process – Strategic Vision, Mission and Objectives – Policies and Goals– Role of Strategists – Factors shaping business strategy.

UNIT II: Environmental Analysis and Strategy Formulation:

[CO2](12)

Environmental Scanning – External Environment Analysis – Internal Environment Analysis – SWOT Analysis – Industry Analysis – Porter's Five Forces Model – Competitive advantage– Corporate Level Strategies — Strategy formulation process.

UNIT III: Strategy Implementation:

[CO3](12)

Strategy Implementation – Issues in Strategy Implementation –Organizational Structure and Strategy – Strategy Implementation: McKinsey 7S Framework – Strategies for Competing in Globalizing Markets – Organizational Culture and Impact on Strategy.

UNIT IV: Strategic Leadership and Evaluation:

[CO4](12)

Strategic Leadership – Types of Strategic Leadership Styles – Strategy Evaluation and Control – Strategic Evaluation Process – Techniques of Strategic Evaluation – Balanced Scorecard.

Text Books :

1. AzharKazmi – Strategic Management and Business Policy, McGraw Hill Education (India).
2. V. S. P. Rao & V. Hari Krishna – Strategic Management: Text and Cases, Excel Books.
3. C. Appa Rao, B. Parvathiswara Rao & K. Sivaramakrishna – Strategic Management and Business Policy, Himalaya Publishing House.

Reference Books:

1. Fred R. David & Forest R. David – Strategic Management: A Competitive Advantage Approach, Pearson Education.
2. Arthur A. Thompson, A. J. Strickland & John Gamble – Crafting and Executing Strategy, McGraw Hill Education.

Web References:

1. <https://www.managementstudyguide.com/strategic-management.htm> – Covers strategic management concepts, models, and case examples.
2. <https://www.tutor2u.net/business/reference/strategic-management> – Provides notes on strategy formulation, implementation, leadership, and control techniques.

Course Objectives:

1. To understand the basic concepts of business ethics and values in organizations.
2. To examine different ethical theories and ethical decision-making in business situations.
3. To study ethical practices in different functional areas of business organizations.
4. To understand corporate social responsibility and the importance of Indian values in management.

Course Outcomes:

1. Explain the concepts of ethics, values, and morality in business organizations.
2. Identify major ethical theories and apply ethical decision-making in business situations.
3. Analyze ethical issues in areas such as human resource management, marketing, finance, and corporate governance.
4. Evaluate the role of Corporate Social Responsibility and Indian values in promoting ethical business practices.

UNIT I: Introduction to Business Ethics and Values: [CO1](12)

Meaning and concept of ethics, values and morality – Nature and importance of business ethics – Relationship between ethics, law and religion – Sources of ethical values – Ethical dilemmas in business – Importance of ethics in modern business organizations.

UNIT II: Ethical Theories and Ethical Decision Making: [CO2] (12)

Ethical principles in business – Major ethical theories – Teleological theory – Deontological theory – Virtue ethics – Ethical decision-making process – Managing ethical dilemmas – Code of ethics and ethical leadership.

UNIT III: Ethics in Business Organizations: [CO3]

(12) Ethics in human resource management – Recruitment and selection – Promotion and wages – Employee rights and responsibilities – Ethics in Production-Ethics in marketing and consumer protection – Ethical issues in finance and accounting.

UNIT IV: Corporate Social Responsibility and Indian Values: [CO4]

(12) Corporate Social Responsibility (CSR) – Responsibilities of business towards stakeholders: Employees, Consumers, Society and Government – Environmental ethics and sustainable development – Indian ethos and values in management – Social audit and ethical business practices.

Text Books:

1. C. S. V. Murthy – Business Ethics and Corporate Governance, Himalaya Publishing House.
2. A. C. Fernando – Business Ethics and Corporate Governance, Pearson Education.
3. S. K. Chakraborty – Ethics in Management: Vedantic Perspectives, Oxford University Press.

Reference Books:

1. O. C. Ferrell, John Fraedrich & Linda Ferrell – Business Ethics: Ethical Decision Making and Cases, Cengage Learning.
2. Manuel G. Velasquez – Business Ethics: Concepts and Cases, Pearson Education.

Web References:

1. <https://www.managementstudyguide.com/business-ethics.htm>
2. <https://www.tutor2u.net/business/reference/business-ethics>

HR SPECIALIZATION ELECTIVE PAPERS
BB323 (HREL03): TALENT MANAGEMENT

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. To understand the concept and importance of talent management in organizations.
2. To learn methods of talent acquisition, development, and retention.
3. To develop knowledge of performance management and employee engagement.
4. To understand recent trends and practices in talent management.

Course Outcomes:

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

1. Explain the concept and importance of talent management.
2. Understand talent acquisition and development processes.
3. Analyze performance management and employee engagement practices.
4. Identify modern trends in talent management.

UNIT I: Introduction to Talent Management: [CO1] (12)

Meaning and Importance of Talent Management – Talent vs Skill – Objectives of Talent Management – Talent Management Process – Role of HR in Talent Management – Challenges in Managing Talent.

UNIT II: Talent Acquisition and Development: [CO2] (12)

Talent Acquisition – Recruitment and Selection – Employer Branding – Training and Development – Learning and Development (L&D) – Career Development and Succession Planning.

UNIT III: Performance Management and Employee Engagement: [CO3] (12)

Performance Management – Performance Appraisal Methods – Feedback and Coaching – Employee Engagement – Motivation – Retention Strategies – Work-Life Balance.

UNIT IV: Trends in Talent Management: [CO4] (12)

Digital HR and HR Analytics – Talent Management in Global Context – Diversity and Inclusion – Remote Work and Gig Economy – Leadership Development – Future of Work.

Text Books:

1. David G. Collings & Kamel Mellahi – Talent Management
2. Lance A. Berger & Dorothy R. Berger – The Talent Management Handbook
3. Dessler – Human Resource Management

Reference Books:

1. Cappelli, Peter – Talent on Demand: Managing Talent in an Age of Uncertainty, Harvard Business Review Press.
2. T.V. Rao – HRD Audit: Evaluating the Human Resource Function for Business Improvement, Sage Publications

Web References:

1. <https://www.shrm.org>
2. <https://www.mindtools.com>
3. [https://www.coursera.org/courses?query=talent %20 management](https://www.coursera.org/courses?query=talent%20management)

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. To understand basic concepts and objectives of employee compensation.
2. To evaluate methods and principles used in wage and salary administration.
3. To identify welfare measures and social security provisions for employees.
4. To understand role of compensation and benefits in motivating employees.

Course Outcomes:

After completing this course, students will be able to,

1. Explain the components and importance of compensation in organizations.
2. Describe different wage payment systems and their application in organizations.
3. Identify various employee welfare programs and social security benefits.
4. Evaluate compensation strategies that improve employee motivation and retention.

UNIT I: Introduction to Employee Compensation:**[CO1] (12)**

Meaning and importance of compensation, objectives of compensation management, components of compensation (wages, salary, incentives, bonuses), factors influencing compensation, compensation policies.

UNIT II: Wage and Salary Administration:**[CO2] (12)**

Wage determination, wage structure, methods of wage payment (time rate, piece rate), minimum wages, wage differentials, job evaluation and wage fixation.

UNIT III: Employee Welfare and Social Security:**[CO3] (12)**

Meaning and significance of employee welfare, statutory and non-statutory welfare measures, social security schemes, employee benefits, health and safety measures in organizations.

UNIT IV: Compensation Management and Employee Motivation:**[CO4] (12)**

Incentive plans, fringe benefits, performance-based pay, reward systems, role of compensation in employee motivation and retention, modern trends in compensation management.

Text Books:

1. Compensation Management – B.D. Singh
2. Compensation and Reward Management – K. Aswathappa
3. Employee Compensation Management – P. Subba Rao
4. Personnel Management and Industrial Relations – P.C. Tripathi
5. Human Resource Management – Gary Dessler

Reference Books:

1. Strategic Compensation: A Human Resource Management Approach – Joseph J. Martocchio
2. Compensation – George T. Milkovich, Jerry M. Newman & Barry Gerhart
3. Human Resource Management – P. Subba Rao
4. Reward Management – Michael Armstrong
5. Managing Human Resources – Luis R. Gomez - Mejia, David B. Balkin & Robert L. Cardy

Web References:

1. Ministry of Labour and Employment – <https://labour.gov.in>
2. International Labour Organization – <https://www.ilo.org>
3. Society for Human Resource Management – <https://www.shrm.org>
4. National Programme on Technology Enhanced Learning – <https://nptel.ac.in>
5. Employee Provident Fund Organisation – <https://www.epfindia.gov.in>

FINANCE SPECIALIZATION ELECTIVE PAPERS
BB323 (FMEL03): INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. Build knowledge about investments, their importance, and distinction from speculation.
2. Develop exposure to financial markets, utility and securities.
3. Understand fundamental and technical analysis.
4. Appreciate the importance and management of investment portfolios.

Course Outcomes:

Upon completion, students should be able to:

1. Identify a financial security as an investment or speculation.
2. Understand the importance and functioning of financial markets.
3. Apply fundamental and technical perspectives to analyze stocks.
4. Understand the nuances of building and optimizing a portfolio.

UNIT I: Conceptual Framework of Investments:

[CO1] (12)

Definition of investment; objectives, characteristics, and process; distinction from speculation.

UNIT II: Financial Markets:

[CO2] (12)

Types of financial markets — exchange vs. OTC; participants. Debt instruments — money market and bond market; equity instruments — shares, IPOs. Other markets — forex, commodities, gold, derivatives. Investment avenues — debt, equity, deposits, mutual funds. Regulatory bodies: RBI and SEBI roles and responsibilities.

UNIT III: Fundamental and Technical Analysis:

[CO3] (12)

Fundamental Analysis: macroeconomic analysis (GDP, inflation, interest rates, money supply); industry life cycle and business cycle analysis; company analysis — financial statements and equity/debt valuation.

Technical Analysis: chart types (line, candlestick, point-and-figure); Dow Theory, Elliott Wave; pattern recognition (trends, flags, head & shoulders, triangles, cup-and-handle); technical indicators — SMA, MACD, RSI, ROC, Bollinger Bands.

UNIT IV: Portfolio Management:

[CO4] (12)

Efficient Market Hypothesis; risk-return using CAPM; diversification; active vs. passive portfolio management; asset allocation; Markowitz Portfolio Theory. Portfolio performance measurement — Sharpe, Treynor, and Jensen ratios.

Text Books :

1. Elton, E. J., Gruber, M. J. & Brown, S. J. — Modern Portfolio Theory and Investment Analysis. Wiley.
2. Reilly, F. K. & Brown, K. C. — Analysis of Investments and Management of Portfolios. Cengage.
3. Chandra, P. — Investment Analysis and Portfolio Management. McGraw-Hill.
4. Kevin, S. — Security Analysis and Portfolio Management. PHI Learning.

Reference Books:

1. Gitman, L. J., & Joehnk, M. D. (2018). Principles of Investments (14th Edition). Pearson Education. – Provides a comprehensive approach to investment theory, portfolio management, and financial markets.
2. Reilly, F. K., & Brown, K. C. (2021). Investment Analysis and Portfolio Management (13th Edition). Cengage Learning. – Covers fundamental and technical analysis, asset valuation, and performance measurement in detail.

Web References:

1. <https://www.cfainstitute.org>
2. <https://www.nism.ac.in>

Course Objectives:

1. Introduce fundamental concepts of income tax — scope, importance, and legal framework.
2. Enable calculation of taxable income and tax liability under the Income Tax Act.
3. Familiarize students with the assessment process and tax audit requirements.
4. Equip students to prepare and file income tax returns using tax management strategies.

Course Outcomes:

On successful completion, students will be able to:

1. Compute taxable income under heads: salaries, house property, and business profits.
2. Calculate income tax liabilities and apply deductions and exemptions appropriately.
3. Analyze tax implications and evaluate planning strategies to minimize legal tax liability.
4. Prepare and file accurate income tax returns.

UNITI: Introduction to Income Tax:**[CO1](12)**

Background of the Income Tax Act 1961; key definitions; concepts of tax planning, tax avoidance and tax evasion. Basic concepts: Assessment Year, Previous Year, Person, Income, Gross Total Income, capital and revenue receipts/expenditure. Residential status and incidence of tax; agricultural income; exempted income.

UNITII: Income from Salaries and House Property:**[CO2](12)**

Salaries: meaning, taxability of allowances and perquisites, profits in lieu of salary, PF and gratuity treatment; computation of salary income.

House Property: chargeability; determination of annual value; deductions from net annual value; unrealized rent; self-occupied property; exemptions; computation of income from house property.

UNITIII: Business/Profession, Capital Gains and Other Sources:**[CO3](12)**

Business & Profession: basis of charge, allowable deductions, depreciation, and tax planning.

Capital Gains: types of capital assets; Cost Inflation Index; exemptions; Capital Gains Account Scheme; meaning of transfer; computation of capital gains.

Other Sources: types of income; allowable deductions; treatment of interest on securities; computation.

UNITIV: Total Income, Assessment and Return Filing:**[CO4] (12)**

Set-off and carry-forward of losses; clubbing of income; deemed incomes; deductions from gross total income. Computation of total taxable income with numericals. Types of assessment; tax calculation for individuals. Practical exposure to ITR filing and provisions relating to advance payment of tax.

Text Books :

1. Singhania, V. K. &Singhania, K. — Direct Taxes Law and Practice. Taxmann.
2. Taxmann — Income Tax Act, 1961 (Bare Act).
3. Singhania, V. K. &Singhania, K. — Direct Taxes Ready Reckoner. Taxmann.
4. Singhania, V. K. — Students' Guide to Income Tax. Taxmann.
5. Gupta, R. — Direct Taxes Manual (2 Vols.). Bharat Law House.

Reference Books:

1. Ahuja, G. & Gupta, R. — Master Guide to Income Tax Act. Wolters Kluwer.
2. Manoharan, T. N. — Income Tax Guidelines and Mini Ready Reckoner. Snow White Publications.

Web References:

1. <http://www.incometax.gov.in>
2. <http://www.incometaxindia.gov.in>

MARKETING SPECIALIZATION ELECTIVE PAPERS
BB323 (MMEL03): DIGITAL MARKETING

L	P	C	INT	EXT
4	-	4	30	70

Course objectives:

1. To introduce the concepts, scope, and importance of Digital Marketing.
2. To develop understanding of digital marketing tools and online promotion methods.
3. To explain the role of email and mobile marketing in business communication.
4. To familiarize students with blogging platforms and content marketing practices.
5. To develop awareness of SEO and modern digital marketing strategies.

Course outcomes:

After successful completion of this, the student will be able to,

1. Identify the concepts, scope, and environment of Digital Marketing.
2. Explain digital marketing mix and online promotional techniques.
3. Analyze the role of email marketing and mobile marketing in business.
4. Examine blogging platforms and content marketing practices.
5. Apply basic SEO and digital marketing strategies

UNIT I: Introduction to Digital Marketing:

[CO1] (12)

Meaning and definition of Digital Marketing – Need and scope of Digital Marketing – Evolution of Digital Marketing – Concepts and approaches to Digital Marketing – Digital marketing environment – Advantages and limitations of Digital Marketing – Examples of good practices in Digital Marketing.

UNIT II: Digital Marketing Mix and Online Promotion:

[CO2] (12)

Digital Marketing Mix – Online Advertising – Search Engine Marketing (SEM) – Lead Generation – Social Media Marketing – Content Marketing and Copy writing – Influencer Marketing: meaning of influencer, payment to influencers, difference between influencer marketing and celebrity endorsements.

UNIT III: Email Marketing and Mobile Marketing:

[CO3] (12)

Email Marketing – Need and importance of emails – Types of marketing emails – Email campaign management – Features of Mail Chimp – Mobile Marketing – B2B and B2C mobile marketing – Mobile advertising.

UNIT IV: Blogging and Content Platforms:

[CO4] (12)

Meaning of blogs – Importance of blogs – Personal blogs and corporate blogs – Popular blog platforms – Blog optimization – Blog analytics – Basics of Search Engine Optimization (SEO) – Role of blogs in content marketing.

Text Books:

1. Digital Marketing: Strategy, Implementation and Practice – Dave Chaffey and Fiona Ellis-Chadwick, Pearson Education, 2019.
2. Understanding Digital Marketing – Damian Ryan, Kogan Page Publishers, 2016.
3. Digital Marketing Strategy – Simon Kingsnorth, Kogan Page Publishers, 2019.

Reference Books:

1. Digital Marketing – Seema Gupta, McGraw Hill Education, 2018.
2. The Art of Digital Marketing – Ian Dodson, Wiley Publications, 2016.

Web References:

1. <https://www.ama.org>
2. <https://www.emerald.com/insight>

Course Objectives:

1. To understand the concepts, scope and of marketing research in decision making.
2. To develop the research design, hypothesis formulation and questionnaire design.
3. To understand sampling methods and techniques of data collection.
4. To familiarize students with basic statistical analysis and research report preparation.

Course Outcomes:**After successful completion of the course, the students**

1. Explain the concepts, types and process of marketing research.
2. Formulate research problems, design research and develop questionnaires.
3. Apply sampling methods and collect primary and secondary data.
4. Analyze data using basic statistical techniques and prepare research reports.

Unit I: Introduction to marketing research:**[CO1] (12)**

Definition, scope, objectives; significance of marketing research in decision making; types of marketing research; Research process; Research proposal; Ethical considerations in marketing research.

Unit II: Formulating research problem:**[CO2] (12)**

Research design and its types; Hypothesis – Null, alternate; Measurement and scaling techniques; questionnaire designing.

Unit III: Census and Sample:**[CO3] (12)**

Meaning, and significance of sampling; Methods of sampling; Determination of sample size and sampling errors. Types of data; Methods of collecting of primary data and secondary data; Tabulation and cleaning of data for analysis.

Unit IV: Descriptive statistics:**[CO4] (12)**

Measures of central tendency and dispersion; Inferential statistics – Confidence intervals and hypothesis testing; Report Writing – Meaning, Types of Reports, Format of Research Report, Presentation of Research Report.

Text Books:

1. Marketing Research – Concepts and Cases – Donald R. Cooper and Pamela S. Schindler, Tata McGraw Hill Publishing Company Limited, New Delhi.
2. Marketing Research – G. C. Beri, Tata McGraw Hill, and New Delhi.
3. Marketing Research – An Applied Orientation – Naresh K. Malhotra and Satyabhushan Das, Pearson Education.

Reference Books:

1. Research for Marketing Decisions – Paul E. Green and Donald S. Tull, PHI.
2. Research Methodology – C. R. Kothari, New Age International Publishers.
3. Marketing Research – Harper W. Boyd Jr. and Ralph Westfall, Prentice Hall.

Web References:

1. <https://www.esomar.org>
2. <https://www.ama.org>

LOGISTICS SPECIALIZATION ELECTIVE PAPERS

BB323 (LMEL03):WAREHOUSE MANAGEMENT

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

1. To introduce warehouse management concepts and operational processes.
2. To study warehouse design, layout planning, and storage systems.
3. To explain warehouse operations including receiving, storage, and order fulfillment.
4. To analyze warehouse technologies and information systems.

Course Outcomes:

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

1. Understand the principles and functions of warehouse management.
2. Describe warehouse layout, design, and storage systems.
3. Analyze warehouse operational processes and inventory control.
4. Evaluate warehouse technologies and digital management systems.

UNIT I: Introduction to Warehouse Management:

[CO1] (12)

Concept of Warehousing – Importance of Warehousing in Supply Chain – Functions of Warehouses – Types of Warehouses – Public, Private, and Bonded Warehouses.

UNIT II: Warehouse Layout and Design:

[CO2] (12)

Warehouse Location Planning – Warehouse Layout Design – Storage Systems and Equipment – Space Utilization Techniques – Safety and Security in Warehouses.

UNIT III: Warehouse Operations:

[CO3] (12)

Receiving and Inspection – Put-away Processes – Storage Methods – Order Picking Systems – Packing and Shipping – Handling Returns and Reverse Logistics.

UNIT IV: Warehouse Technology:

[CO4] (12)

Warehouse Management Systems (WMS) – Barcode Technology – RFID Systems – Inventory Tracking Systems – Automation and Robotics in Warehouses.

Text Books:

1. Warehouse Management – Gwynne Richards, Kogan Page.
2. Logistics and Supply Chain Management – Martin Christopher.
3. Warehouse & Distribution Science – John Bartholdi.
4. Designing and Managing the Supply Chain – David Simchi-Levi.

Reference Books:

1. Frazelle, E. H. –World-Class Warehousing and Material Handling, 2nd Edition, McGraw Hill Education.
2. Ackerman, K. B. – Practical Handbook of Warehousing, 6th Edition, Springer.

Web References:

1. <https://www.logiwa.com>
2. <https://www.supplychaindigital.com>
3. <https://www.inboundlogistics.com>
4. <https://www.logisticsmgmt.com>

Course Objectives:

1. To introduce the concepts and significance of international logistics in global trade.
2. To understand export and import procedures and international trade regulations.
3. To study global transportation systems and logistics networks.
4. To analyze customs procedures and documentation required in international trade.

Course Outcomes:

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

1. Understand the structure and functioning of global logistics systems.
2. Explain export and import procedures and documentation.
3. Analyze international transportation and shipping operations.
4. Evaluate the role of customs and trade regulations in global logistics.

UNIT I: Introduction to International Logistics:**[CO1] (12)**

Concept of International Logistics – International Trade Environment – Role of Logistics in International Business – Challenges in International Logistics Operations.

UNIT II: International Transportation Systems:**[CO2] (12)**

Ocean Freight Transportation – Air Cargo Logistics – Multimodal Transportation Systems – Shipping Lines and Freight Forwarders – Containerization – Cost Considerations in Global Shipping.

UNIT III: Export and Import Procedures:**[CO3] (12)**

Export Documentation – Import Documentation– Import Regulations – Role of Customs Authorities – INCOTERMS (International Commercial Terms) – International Trade Agreements and Policies.

UNIT IV: Global Warehousing and Distribution:**[CO4] (12)**

International Warehousing Systems – Bonded Warehouses – Global Distribution Centers – Inventory Control in International Trade – Cross-Border Logistics.

Text Books:

1. Global Logistics and Supply Chain Management – John Mangan, Wiley.
2. International Logistics – Pierre A. David, Biztantra.
3. Global Supply Chain Management – John T. Mentzer.
4. Logistics and Supply Chain Management – Martin Christopher.

Reference Books:

1. Bowersox, Donald J., Closs, David J., Cooper, M. Bixby, & Bowersox, John C. – Supply Chain Logistics Management, 5th Edition, McGraw Hill Education.
2. Rushton, Alan, Croucher, Phil & Baker, Peter – The Handbook of Logistics and Distribution Management, 7th Edition, Kogan Page.

Web References:

1. <https://www.trade.gov>
2. <https://www.wto.org>
3. <https://www.inboundlogistics.com>
4. <https://www.logisticsmgmt.com>

ARTTIFICIAL INTELLIGENCE SPECIALIZATION ELECTIVE PAPERS

BB323 (AIEL03): DATA AND VISUAL ANALYTICS IN AI

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course Objectives:

The main objectives of this course are to:

1. To introduce the basic concepts of data warehousing, modeling using data cubes.
2. To provide knowledge of data mining techniques, types of data and patterns.
3. To teach mapping of data onto visual representations, understanding aesthetics.
4. To introduce techniques for visualizing single and multiple distributions using histograms.

Course Outcomes:

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

1. Design a data warehouse, model data using OLAP and cubes.
2. Perform data pre-processing and apply data mining techniques.
3. Create effective visualizations to represent data amounts and relationships.
4. Analyze and compare data distributions visually to identify trends, patterns, and anomalies.

UNIT I: Data Warehouse:

[CO1] (12)

Data Warehouse: Basic Concepts, Data Warehouse Modelling: Data Cube and OLAP, Data Warehouse Design and Usage, Data Warehouse Implementation.

Getting to know Data: Data Objects and Attribute Types, Basic Statistical Descriptions of Data, Measuring Data Similarity and Dissimilarity.

UNIT II: Data Mining:

[CO2] (12)

What is Data Mining, Kinds of Data, Kinds of Patterns, TechnologiesUsed, Major Issues in Data Mining.

Data Pre-processing: Data cleaning, Data Integration, Data Reduction, DataTransformation and DataDiscretization.

UNIT III: Visualizing Data:

[CO3] (12)

Mapping data onto aesthetics, aesthetics and types of data, scale smap data values onto aesthetics, visualizing amounts: bar plots, grouped and stacked bars, dot plots and heat maps, exploration of visualization tools.

UNIT IV: Visualizing Distributions:

[CO4] (12)

Histograms and density plots - visualizing a singledistribution, visualizing multiple distributions at the same time.

Text Books:

1. Jiawei Han and Micheline Kamber, Data Mining- Concepts and Techniques, Morgan Kaufmann Publishers, Elsevier, 3rd Edition.
2. Claus O. Wilke, Fundamentals of Data Visualization, Oreilly publication, 1st Edition .

Reference Books:

1. Arun K Pujari, Data Mining Techniques, 3rdEdition, Universities Press.
- Kieran Healy, Data Visualization: A Practical Introduction 1stEdition, Princeton university press

Web References:

1. <https://www.tutorialspoint.com/dwh/index.htm>
2. <https://www.geeksforgeeks.org/data-mining-introduction/>
3. <https://www.datacamp.com/community/tutorials/data-visualization-python>

Course Objectives:

1. To introduce algorithm fundamentals, recursion and performance analysis.
2. To study linear data structures including arrays, stacks, queues, and linked lists.
3. To understand non-linear data structures including trees and graphs.
4. To learn searching algorithms (sequential, binary, BFS, DFS) and sorting algorithms.

Course Outcomes:

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

1. Write, analyze, and evaluate algorithms using recursion, Big-O/Theta/Omega notations.
2. Implement and use linear data structures for solving computational problems efficiently.
3. Design, represent, and traverse trees and graphs, and choose appropriate structures.
4. Implement efficient searching and sorting algorithms and analyze their performance.

UNIT I: Basic Terminologies and Introduction to Algorithm & Data Organization:[CO1] (12)

Algorithm specification, Recursion, Performance analysis, Asymptotic Notation - The Big-O, Omega and Theta notation, Programming Style, Refinement of Coding - Time-Space Trade Off, Testing, Data Abstraction

UNIT II: Linear Data Structure:**[CO2] (12)**

Array, Stack, Queue, Linked-list and its types, Various Representations, Operations & Applications of Linear Data Structures.

UNIT III: Non-linear Data Structure:**[CO3] (12)**

Trees (Binary Tree, Threaded Binary Tree, Binary Search Tree, B & B+ Tree, AVL Tree, Splay Tree) and Graphs (Directed, Undirected), Various Representations, Operations & Applications of Non-Linear Data Structures

UNIT IV: Searching and Sorting on Various Data Structures:**[CO4]**

(12) Sequential Search, Binary Search, Comparison Trees, Breadth First Search, Depth First Search Insertion Sort, Selection Sort, Shell Sort, Divide and Conquer Sort, Merge Sort, Quick Sort, Heap sort, Introduction to Hashing

Graph: Basic Terminologies and Representations, Graph search and traversal algorithms and complexity analysis.

Text Books:

1. Fundamentals of Data Structures, E. Horowitz, S. Sahni, S. A-Freed, Universities Press.
2. Data Structures and Algorithms, A. V. Aho, J. E. Hopperoft, J. D. Ullman, Pearson.

Reference Books:

1. The Art of Computer Programming: Volume 1: Fundamental Algorithms, Donald E. Knuth.
2. Introduction to Algorithms, Thomas, H. Cormen, Charles E. Leiserson, Ronald L. Rivest, Clifford Stein, The MIT Press.
3. Open Data Structures: An Introduction (Open Paths to Enriched Learning), (Thirty First Edition), Pat Morin, UBC Press.

Web References:

1. <https://www.geeksforgeeks.org/data-structures/>
2. https://www.tutorialspoint.com/data_structures_algorithms/index.htm
3. <https://www.programiz.com/dsa/sorting-algorithms>

BB323 (BAEL03) : BIG DATA ANALYTICS

L	P	C	INT	EXT
<u>4</u>	<u>-</u>	<u>4</u>	<u>30</u>	<u>70</u>

Course objectives:

- 1 To gain insights on the concept of big data, importance and various sources of data.
- 2 Learn about big data analytics and its business implications.
- 3 Understand several key big data technologies used for storage, analysis and manipulation of data.
- 4 To understand the key terminology of Hadoop Distributed File Systems (HDFS).

Course outcomes:

After completion of the unit student is able to

1. Get an overview of Big data in the real world.
2. Know how to Optimize business decisions and create competitive advantage with Big data analytics.
3. Identify the key concepts of Hadoop framework,
4. Know about basic file system processes in hadoop.

UNIT I: An Overview to Big Data:**[CO1] (12)**

Introduction to Big data: Characteristics of Data, Evolution of Big Data, Definition of Big Data, Challenges with Big Data, Traditional Business Intelligence (BI) versus Big Data.

UNIT II: Big Data Analytics:**[CO2] (12)**

Big data analytics: Classification of Analytics, Importance and challenges facing big data, Terminologies Used in Big Data Environments, The Big Data Technology Landscape.

UNIT III: Hadoop Framework:**[CO3] (12)**

Introducing Hadoop, RDBMS versus Hadoop, Distributed Computing Challenges, History and overview of Hadoop, Hadoop Distributors.

UNIT IV: The Hadoop Distributed File System:**[CO4] (12)**

Hadoop Distributed File System (HDFS): The Design of HDFS, HDFS Concepts, Basic Filesystem Operations, and Hadoop Filesystems.

Text Books:

1. Tom White — Hadoop: The Definitive Guide | Third Edition, O'Reilly Media, 2012.
2. Seema Acharya, Subhasini Chellappan, "Big Data Analytics" Wiley 2015.
3. Michael Berthold, David J. Hand, "Intelligent Data Analysis", Springer, 2007.

References:

1. Jay Liebowitz, —Big Data and Business Analytics | Auerbach Publications, CRC press (2013).
2. Tom Plunkett, Mark Hornick, —Using R to Unlock the Value of Big Data: Big Data Analytics with Oracle R Enterprise and Oracle R Connector for Hadoop |, McGraw-Hill/Osborne Media (2013), Oracle press.
3. Anand Rajaraman and Jeffrey David Ullman, —Mining of Massive Datasets |, Cambridge University Press, 2012.

Web References:

1. https://www.sas.com/en_us/insights/analytics/big-data-analytics.html
2. <https://www.searchbusinessanalytics.techtarget.com/definition/big-data-analytics>
3. <https://www.webopedia.com>

Course Objectives:

1. To give basic information about the computer and office functions.
2. To give knowledge about information flow model.
3. To familiarize with the use of MS Office □ MS word, MS Excel, & MS Power point.
4. To know the advanced functions in MS Excel & MS Power point.

Course outcomes:

1. Recognize the basic concept of office automation in Office structure.
2. Understand the Approaches of optimization of office information work flow model.
3. Understanding the Process of Merging Rules in MS word.
4. Demonstrate the mechanics and usage of Excel pivot chart from pivot table.

UNIT I: Introduction:**[CO1] (12)**

Modern Office and Productivity, Office Automation, Matching Computer and office Function, Impact of Automation on Productivity, Economic Considerations, Impact of Office Automation in office Structure.

UNIT II: Approaches to Office Automation:**[CO2](12)**

Information Flow Model Development and optimization, Analysis of Office Structure, Optimization of Information Flow Model, Impact of Office Structure Development, Technical Aspects of Office Automation, Human Considerations. Application Software's.

UNIT III: Working with Microsoft Office Suite: MS WORD:**[CO3](12)**

Merging Documents , Typing new address list Importing address list from Excel file ,Write and insert field , Merging with outlook contact , Preview Result , Merging to envelopes , Merging to label , Setting rules for merges , Finish & Merge options.

MS EXCEL: Creating Simple Formulas, Setting up your own formula Date and Time Functions, Financial Functions, Logical Functions, Lookup and Reference Functions Mathematical Functions , Statistical Functions, Text Functions.

UNIT IV: MS EXCEL Advanced:**[CO4] (12)**

Understand Pivot Tables, create a Pivot Table, Framework Using the Pivot Table and Pivot Chart, Create Pivot Chart from pivot Table. Inserting slicer, Creating and Recording Macros, Assigning Macros to the work sheets, Saving Macro enabled workbook

MS PowerPoint: Shapes, Clipart and Picture, Word Art, Smart Art, Change the Order of Objects, inserting slide header and footer, Inserting Text boxes, Inserting shapes, using quick styles, Inserting Word art, Inserting symbols, Inserting Chart.

Text Books:

1. Vijayaraghavan. G., Computer Applications for Management, 1st Edition (2006), Himalaya Publishing Company.
2. Rayudu, C.S., E-Commerce and E-Business, 1st Edition (2004), Himalaya Publishing Company.
3. Agarwala, N. Kamlesh, Business on the Net, Macmillan Publishers

Reference Books:

1. George Reynolds, Information Technology for Managers, Course Tech., 2009.
2. Shelly, Cashman and Vermaat, Microsoft Office 2007, Course Tech., 2007.
3. Shelly and Vermaat, Discovering Computers, Course Tech., 2010.

Web References:

1. https://www.sas.com/en_us/insights/analytics/big-data-analytics.html
2. <https://support.microsoft.com/en-us/office>
3. https://www.tutorialspoint.com/ms_word/ms_word_mail_merge.htm

DISCIPLINE SPECIFIC ELECTIVE AUDIT COURSES
HUMAN RESOURCE MANAGEMENT ELECTIVE
BB351 (HRAC01): PERSONALITY DEVELOPMENT (Audit course)

L	P	C	INT	EXT
<u>3</u>	<u>-</u>	<u>-</u>	<u>100</u>	<u>-</u>

Course Objectives:

1. To develop self-awareness and improve overall personality.
2. To enhance communication and interpersonal skills.
3. To build confidence, leadership, and positive attitude.
4. To prepare students for professional and personal success.

Course Outcomes:

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

1. Understand the concept and importance of personality development.
2. Improve communication and interpersonal skills.
3. Develop confidence, leadership qualities, and positive attitude.
4. Apply personality development skills in career and life situations.

UNIT I: Introduction to Personality Development:

[CO1](8)

Meaning of Personality – Determinants of Personality – Importance of Personality Development – Self-Awareness – Self-Concept and Self-Esteem – Positive Attitude – Goal Setting.

UNIT II: Communication Skills:

[CO2] (8)

Meaning and Process of Communication – Types of Communication (Verbal and Non-Verbal) – Barriers to Communication – Listening Skills – Body Language – Public Speaking Skills.

UNIT III: Interpersonal and Leadership Skills:

[CO3](8)

Interpersonal Skills – Teamwork and Group Dynamics – Leadership Qualities – Motivation – Conflict Management – Time Management – Stress Management.

UNIT IV: Professional Skills and Career Development:

[CO4](8)

Resume Writing – Interview Skills – Presentation Skills – Grooming and Etiquette – Workplace Ethics – Personality Development for Career Success.

Text Books:

1. Hurlock – Personality Development
2. Stephen P. Robbins – Organizational Behavior
3. Barun K. Mitra – Personality Development and Soft Skills

Reference Books:

1. R.K. Bansal & J.B. Harrison– Personality Development and Communication Skills, Vikas Publishing House.
2. S.P. Arora – Personality Development and Communication Skills, Vikas Publishing House.

Web References:

1. <https://www.skillsyouneed.com>
2. <https://www.mindtools.com>
3. <https://www.coursera.org/courses?query=personality%20development>

L	P	C	INT	EXT
<u>3</u>	<u>-</u>	<u>-</u>	<u>100</u>	<u>-</u>

Course Objectives:

1. Stress and its effects on individuals.
2. Major causes of stress in personal and organizational settings.
3. Effective techniques and strategies for managing stress.
4. Stress management practices in organizations.

Course Outcomes:

After completing this course, students will be able to,

1. Identify different types and sources of stress in personal and professional life.
2. Explain how stress affects health, behavior, and job performance.
3. Apply various stress management techniques to improve well-being.
4. Suggest strategies to manage stress in workplace environments.

UNITI: Introduction to Stress Management:

[CO1](8)

Meaning and concept of stress, types of stress (positive and negative stress), sources of stress, symptoms of stress, impact of stress on physical and mental health.

UNITII: Causes and Consequences of Stress:

[CO2] (8)

Work-related stress, personal stress, environmental stressors, organizational stress, consequences of stress on health, behavior and productivity.

UNIT III: Stress Management Techniques:

[CO3](8)

Coping strategies, time management, relaxation techniques, meditation, yoga, physical exercise, positive thinking and emotional control.

UNIT IV: Stress Management in Workplace:

[CO4] (8)

Stress in organizations, role of managers in stress management, work-life balance, counseling and employee assistance programs, building a stress-free work environment.

Text Books:

1. Stress Management – K. Aswathappa
2. Stress Management: A Wellness Approach – Nanette E. Tummers
3. Stress and Its Management – S.K. Chakraborty
4. Organizational Behavior – Stephen P. Robbins & Timothy A. Judge
5. Managing Stress – Brian Luke Seaward

Reference Books:

1. The Relaxation Response – Herbert Benson
2. Full Catastrophe Living – Jon Kabat-Zinn
3. Stress Management for Life – Michael Olpin & Margie Hesson
4. Managing Stress: Principles and Strategies for Health and Well-Being – Brian Luke Seaward
5. The Stress Solution – Arthur M. Nezu, Christine Maguth Nezu & Thomas J. Lombardo

Web References:

1. World Health Organization – <https://www.who.int>
2. American Psychological Association – <https://www.apa.org>
3. National Institute of Mental Health – <https://www.nimh.nih.gov>
4. National Programme on Technology Enhanced Learning – <https://nptel.ac.in>
5. International Labour Organization – <https://www.ilo.org>

FINANCIAL MANAGEMENT ELECTIVE
BB351 (FMAC01): FUNDAMENTALS OF INVESTMENT(Audit course)

Course Objectives:

1. To understand basic concepts of investment.
2. To know different types of investment options.
3. To learn risk and return concepts.
4. To get an idea about portfolio management and recent trends.

L	P	C	INT	EXT
<u>3</u>	<u>-</u>	<u>-</u>	<u>100</u>	<u>-</u>

Course Outcomes:

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

1. Understand basic investment concepts.
2. Identify different investment avenues.
3. Analyze risk and return.
4. Understand portfolio management and new trends.

UNIT I: Introduction To Investment:

[CO1] (8)

Meaning of Investment – Importance – Objectives – Types of Investment – Difference between Investment, Speculation and Gambling – Investment Process – Basic idea of Time Value of Money.

UNIT II: Investment Avenues:

[CO2] (8)

Types of Investments – Shares, Debentures, Bonds – Mutual Funds – Bank Deposits – Insurance – Gold and Real Estate – Government Securities – Simple comparison of different options.

UNIT III: Risk and Return:

[CO3] (8)

Meaning of Risk and Return – Types of Risk – Simple calculation of Return – Risk and Return relationship – Diversification – Basic idea of Fundamental and Technical Analysis.

UNIT IV: Portfolio and Recent Trends:

[CO4] (8)

Meaning of Portfolio – Simple Portfolio Selection – Diversification – Introduction to Portfolio Management – Digital Investment Apps – ESG Investing – Recent trends.

Text Books:

1. Prasanna Chandra – Investment Analysis and Portfolio Management
2. V.K. Bhalla – Investment Management
3. Fischer & Jordan – Security Analysis

Reference Books:

1. R.P. Rustagi – Investment Analysis and Portfolio Management, Sultan Chand & Sons, New Delhi.
2. Kevin, S. –Security Analysis and Portfolio Management, Prentice Hall of India, New Delhi.

Web References:

1. <https://www.investopedia.com>
2. <https://www.nseindia.com>
3. <https://www.sebi.gov.in>

L	P	C	INT	EXT
3	-	-	100	-

Course Objectives:

1. To introduce the basic concepts of personal finance and financial planning.
2. To develop skills in budgeting, saving, and managing personal income.
3. To understand investment options and risk management.
4. To provide knowledge of taxation and retirement planning.

Course Outcomes:

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

1. Explain the concepts and importance of personal finance.
2. Prepare personal budgets and manage savings effectively.
3. Evaluate investment alternatives and manage financial risk.
4. Understand taxation and plan for retirement.

UNIT I: Introduction to Personal Finance:

[CO1](8)

Meaning and Importance of Personal Finance – Financial Goals (short-term and long-term) – Steps in Financial Planning – Income, Expenditure and Savings – Spending Patterns – Time Value of Money (basic concept).

UNIT II: Budgeting and Banking:

[CO2](8)

Meaning and Types of Budget – Personal Budget Preparation – Importance of Saving and Emergency Fund – Banking Services – Types of Bank Accounts – Digital Banking and Payment Systems.

UNIT III: Investment and Risk Management:

[CO3](8)

Meaning of Investment – Types of Investment Options – Risk and Return – Diversification – Insurance (Life and General) – Basic idea of Mutual Funds and Stock Market.

UNIT IV: Tax and Retirement Planning:

[CO4](8)

Basics of Taxation – Types of Taxes – Tax Saving Instruments – Retirement Planning – Pension Schemes – Provident Fund – Importance of Financial Security for Future.

Text Books:

1. Kapoor, Dlabay & Hughes – Personal Finance
2. Jeff Madura – Personal Finance
3. H.K. Sahni – Personal Finance

Reference Books:

1. Jack R. Kapoor, Les R. Dlabay, Robert J. Hughes & Melissa M. Hart – Personal Finance, McGraw-Hill Education.
2. Jeff Madura – Personal Finance, Pearson Education.

Web References:

1. <https://www.investopedia.com/personal-finance-4427760>
2. <https://www.rbi.org.in>
3. <https://www.sebi.gov.in>

MARKETING MANAGEMENT ELECTIVE
BB351 (MMAC01): INDUSTRIAL MARKETING (Audit course)

L	P	C	INT	EXT
<u>3</u>	<u>-</u>	<u>-</u>	<u>100</u>	<u>-</u>

Course Objectives:

1. To introduce the basic concepts and importance of industrial marketing.
2. To understand the differences between consumer and industrial markets.
3. To study buying behavior and decision-making in industrial markets.
4. To analyze marketing strategies for industrial products and services.

Course Outcomes:

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

1. Understand the nature and scope of industrial marketing.
2. Analyze industrial buyer behavior and organizational buying processes.
3. Develop marketing strategies for industrial goods and services.
4. Evaluate distribution, pricing, and promotional strategies in industrial markets.

UNIT I: Introduction to Industrial Marketing:

[CO1](8)

Industrial Marketing – Meaning, Definition, and Importance – Nature and Scope of Industrial Marketing – Differences between Industrial Marketing and Consumer Marketing – Classification of Industrial Products – Role of Industrial Marketing in Economic Development.

UNIT II: Industrial Buyer Behavior:

[CO2](8)

Characteristics of Industrial Buyers – Types of Industrial Customers (OEMs, Government, Institutions) – Buying Situations (New Task, Modified Rebuy, Straight Rebuy) – Buying Center Concept – Factors Influencing Industrial Buying Behavior – Organizational Buying Process.

UNIT III: Industrial Marketing Strategy:

[CO3](8)

Market Segmentation in Industrial Markets – Targeting and Positioning Strategies – Product Strategy for Industrial Goods – Branding and Packaging in Industrial Marketing – Pricing Strategies (Cost-based, Value-based, Competitive Pricing).

UNIT IV: Distribution and Promotion in Industrial Marketing:

[CO4](8)

Channels of Distribution in Industrial Markets – Logistics and Supply Chain in Industrial Marketing – Promotional Tools (Personal Selling, Trade Shows, Technical Advertising) – Relationship Marketing and Customer Retention Strategies.

Text Books:

1. Industrial Marketing – Krishna K. Havaldar.
2. Business Marketing Management – Michael D. Hutt and Thomas W. Speh.
3. Marketing Management – Philip Kotler and Kevin Lane Keller.
4. Industrial Marketing – Richard M. Hill.

Reference Books:

1. Industrial Marketing Analysis, Planning and Control – Ford D.
2. Business to Business Marketing – Ross Brennan, Louise Canning, Raymond McDowell.
3. Marketing Channels – Louis W. Stern and Adel I. El-Ansary.

Web References:

1. <https://www.marketing91.com>
2. <https://www.investopedia.com>
3. <https://www.businessstandard.com>
4. <https://www.ibef.org>

L	P	C	INT	EXT
<u>3</u>	<u>-</u>	<u>-</u>	<u>100</u>	<u>-</u>

Course Objectives:

1. To introduce the concepts and importance of Agri marketing.
2. To understand the structure and functioning of Agri markets in India.
3. To study marketing channels, pricing, and government policies in Agriculture.
4. To analyze modern trends and challenges in Agri marketing.

Course Outcomes:

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

1. Understand the nature and scope of Agri marketing.
2. Analyze Agri marketing systems and channels.
3. Evaluate pricing methods and government interventions in Agri markets.
4. Identify modern marketing trends and opportunities in Agriculture.

UNIT I: Introduction to Agri Marketing:**[CO1] (8)**

Agri Marketing – Meaning, Definition, and Importance – Nature and Scope of Agri Marketing – Role of Agri Marketing in Economic Development – Problems of Agri Marketing in India.

UNIT I: Agri Marketing Structure and Channels:

[CO2](8) Structure of Agri Markets – Primary, Secondary, and Terminal Markets – Marketing Channels in Agriculture – Role of Intermediaries (Wholesalers, Commission Agents, Retailers) – Regulated Markets and APMC.

UNIT III: Pricing and Government Policies in Agri Marketing:**[CO3](8)**

Price Determination in Agri Markets – Demand and Supply Factors – Minimum Support Price – Government Policies and Schemes – Warehousing, Storage, and Transportation – Role of e-NAM in Agri Marketing.

UNIT IV: Modern Trends in Agri Marketing:**[CO4] (8)**

Agri Marketing Reforms in India – Contract Farming – Direct Marketing and Farmer Markets – Digital Marketing in Agriculture – Agri Export Marketing – Challenges in Agri Marketing – Future Trends and Opportunities in Agri Business.

Text Books:

1. Agri Marketing in India – S.S. Acharya and N.L. Agarwal.
2. Agri Marketing – C.B. Mamoria and R.L. Joshi.
3. Marketing Management – Philip Kotler and Kevin Lane Keller.
4. Fundamentals of Agri Marketing – K.V. Raju.

Reference Books:

1. Agri Marketing and Price Analysis – F.C. Baidya.
2. Agri Marketing: Structural Issues and Government Intervention – Sankar Lal.
3. Principles of Marketing – Gary Armstrong and Philip Kotler.

Web References:

1. <https://www.agmarknet.gov.in>
2. <https://www.enam.gov.in>
3. <https://www.indiabudget.gov.in>
4. <https://www.ibef.org>

LOGISTICS MANAGEMENT ELECTIVE
BB351 (LMAC01) :ENTREPRENEURSHIP IN LOGISTICS(Audit course)

L	P	C	INT	EXT
<u>3</u>	<u>-</u>	<u>-</u>	<u>100</u>	<u>-</u>

Course Objectives:

1. To introduce the concept of entrepreneurship in the logistics.
2. To understand opportunities and challenges in logistics entrepreneurship.
3. To study the process of starting and managing a logistics business.
4. To examine innovation and emerging entrepreneurial trends in logistics.

Course Outcomes:

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

1. Understand the concept and importance of entrepreneurship in logistics.
2. Identify business opportunities in logistics and supply chain sectors.
3. Develop entrepreneurial skills required for starting logistics ventures.
4. Evaluate innovative and technology-driven logistics start-ups.

UNIT I: Introduction To Entrepreneurship In Logistics: [CO1](8)

Concept of Entrepreneurship – Meaning and Importance of Entrepreneurship– Characteristics and Qualities of Successful Entrepreneurs –Scope of Entrepreneurship in Logistics.

UNIT II: Logistics Business Opportunities: [CO2](8)

Entrepreneurial Opportunities in Logistics – Freight and Transportation Services – Courier and Parcel Delivery Services – Warehousing and Distribution Services.

UNIT III: Establishing a Logistics Enterprise: [CO3](8)

Business Idea Generation and Opportunity Identification – Business Plan Preparation – Legal Requirements and Registration – Licensing and Regulatory Compliance – Infrastructure and Resource Requirements.

UNIT IV: Innovation and Emerging Trends In Logistics Entrepreneurship: [CO4](8)

Digital Platforms and Logistics Start-ups – Automation and Smart Logistics – Challenges in Logistics Entrepreneurship – Future Trends and Opportunities in Logistics Industry.

Text Books:

1. Entrepreneurship – Robert D. Hisrich, Michael P. Peters, and Dean A. Shepherd.
2. Logistics and Supply Chain Management – Martin Christopher.
3. Entrepreneurship Development – S.S. Khanka.
4. Supply Chain Management – Sunil Chopra and Peter Meindl.

Reference Books:

1. S.S. Khanka – Entrepreneurship Development, S. Chand Publishing.
2. B.S. Sahay – Supply Chain Management, Macmillan Publishers India.

Web References:

1. <https://www.supplychaindigital.com>
2. <https://www.inboundlogistics.com>
3. <https://www.logisticsmgmt.com>
4. <https://www.entrepreneur.com>

L	P	C	INT	EXT
<u>3</u>	<u>-</u>	<u>-</u>	<u>100</u>	<u>-</u>

Course Objectives:

1. To introduce the importance of safety practices in warehouse operations.
2. To understand different types of warehouse hazards and risk factors.
3. To familiarize students with safety equipment, and emergency response systems.
4. To develop awareness of workplace safety regulations and accident prevention techniques.

Course Outcomes:

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

1. Understand the importance of safety management in warehouses.
2. Identify potential hazards and risks in warehouse operations.
3. Explain the role of safety equipment and emergency preparedness in warehouses.
4. Evaluate safety policies and procedures for accident prevention and workplace safety.

UNIT I: Introduction to Warehouse Safety:

[CO1](8)

Meaning and Importance of Warehouse Safety – Types of Warehouses and Safety Concerns – Causes of Warehouse Accidents – Safety Culture in Warehouse Operations.

UNIT II: Warehouse Hazards and Risk Management:

[CO2](8)

Types of Warehouse Hazards – Physical Hazards, Chemical Hazards, and Mechanical Hazards – Risk Identification and Assessment – Safety Audits and Inspections – Hazard Control Measures.

UNIT III: Fire Safety and Emergency Management:

[CO3](8)

Fire Hazards in Warehouses – Fire Prevention Techniques – Fire Safety Equipment and Systems – Emergency Relocation Procedures – First Aid and Accident Response.

UNIT IV: Safety Regulations and Best Practices:

[CO4](8)

Workplace Safety Policies – Safety Training and Employee Awareness – Safety Monitoring and Reporting – Technology for Warehouse Safety – Best Practices for Safe Warehouse Operations.

Text Books:

1. Warehouse Management – Gwynne Richards, Kogan Page.
2. Logistics and Supply Chain Management – Martin Christopher, Pearson.
3. Warehouse & Distribution Science – John Bartholdi and Steven Hackman.
4. Introduction to Logistics Systems Management – Gianpaolo Ghiani, Gilbert Laporte.

Reference Books:

1. Safety Management in Industry – N.V. Krishnan.
2. Industrial Safety Management – L.M. Deshmukh.
3. Logistics Management and Strategy – Alan Harrison & Remko Van Hoek.

Web References:

1. <https://www.osha.gov>
2. <https://www.cscmp.org>
3. <https://www.inboundlogistics.com>
4. <https://www.logisticsmgmt.com>

ARTIFICIAL INTELLIGENCE & DATA SCIENCE ELECTIVE
BB351 (AIAC01) : BUSINESS ANALYTICS AND DATA VISUALIZATION(Audit course)

L	P	C	INT	EXT
<u>3</u>	<u>-</u>	<u>-</u>	<u>100</u>	<u>-</u>

Course Objectives:

1. To introduce the concepts and applications of Business Analytics.
2. To understand data collection, preparation, and analytical techniques.
3. To develop skills in data visualization using modern tools.
4. To enable data-driven decision making in business environments.

Course Outcomes:

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

1. Explain the fundamentals of Business Analytics and its applications.
2. Analyze business data using descriptive and predictive techniques.
3. Create effective data visualizations for business insights.
4. Apply analytics and visualization tools for decision making.

UNIT I: Introduction to Business Analytics:

[CO1](8)

Meaning and Scope of Business Analytics – Importance of Analytics in Business – Types of Analytics (Descriptive, Diagnostic, Predictive, Prescriptive) – Data Sources – Business Intelligence and Analytics – Applications of Business Analytics.

UNIT II: Data Collection and Analysis:

[CO2] (8)

Data Collection Methods – Structured and Unstructured Data – Data Cleaning and Preparation – Descriptive Statistics – Measures of Central Tendency and Dispersion – Introduction to Predictive Analytics – Correlation and Trend Analysis.

UNIT III: Data Visualization Techniques:

[CO3] (8)

Concept of Data Visualization – Principles of Effective Visualization – Charts and Graphs (Bar Chart, Pie Chart, Line Chart, Histogram, Scatter Plot) – Dashboard Design – Storytelling with Data – Visualization Best Practices.

UNIT IV: Analytics Tools and Business Applications:

[CO4](8)

Introduction to MS Excel for Analytics – Data Analysis using Excel Functions and Pivot Tables – Introduction to Power BI/Tableau – Creating Dashboards and Reports – Business Decision Making using Analytics – Ethical Issues in Data Analytics.

Text Books:

1. Evans, J. R. – Business Analytics
2. James Evans and Gregory – Business Analytics: Methods, Models and Decisions
3. Knaflic, Cole Nussbaumer – Storytelling with Data: A Data Visualization Guide for Business Professionals

Reference Books:

1. Ramesh Sharda, Dursun Delen & Efraim Turban – Business Intelligence, Analytics, and Data Science: A Managerial Perspective, Pearson.
2. Stephen Few – Now You See It: Simple Visualization Techniques for Quantitative Analysis, Analytics Press.

Web References:

1. https://www.tutorialspoint.com/business_analytics
2. <https://www.geeksforgeeks.org/data-visualization-tutorial>
3. <https://www.tableau.com/learn>
4. <https://learn.microsoft.com/en-us/power-bi>

L	P	C	INT	EXT
<u>3</u>	<u>-</u>	<u>-</u>	<u>100</u>	<u>-</u>

Course Objectives:

1. To introduce the fundamentals of Artificial Intelligence and its role in business.
2. To understand the application of AI in various business functions.
3. To explore AI tools and technologies used in organizations.
4. To examine the opportunities, challenges, and ethical issues of AI in business.

Course Outcomes:

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

1. Explain the concepts and significance of Artificial Intelligence in business.
2. Identify AI applications in major business functions.
3. Analyze the use of AI tools for business decision-making and process improvement.
4. Evaluate the benefits, challenges, and ethical implications of AI adoption in organizations.

Unit I: Introduction to Artificial Intelligence in Business: [CO1](8)

Meaning and Evolution of Artificial Intelligence – Concepts of AI, Machine Learning, Deep Learning, and Generative AI – Importance of AI in Modern Business – AI Technologies and Business Transformation – Benefits and Limitations of AI – Overview of AI-driven Organizations.

Unit II: AI Applications in Marketing and Human Resource Management: [CO2] (8)

AI in Marketing – Customer Segmentation – Personalized Recommendations – Chatbots and Virtual Assistants – Sentiment Analysis – AI-based Digital Advertising – AI in Human Resource Management – Recruitment and Talent Acquisition – Employee Performance Analytics – Training and Development – Workforce Planning.

Unit III: AI Applications in Finance, Operations and Supply Chain Management: [CO3] (8)

AI in Financial Management – Fraud Detection – Credit Scoring – Risk Analysis – Algorithmic Trading – AI in Operations Management – Process Automation – Predictive Maintenance – Quality Control – AI in Supply Chain Management – Demand Forecasting – Inventory Optimization – Logistics and Route Planning.

Unit IV: AI Tools, Ethics and Future of AI in Business: [CO4](8)

Popular AI Tools and Platforms – Generative AI Applications in Business – Decision Support Systems – Business Intelligence and AI – Ethical Issues in AI – Data Privacy and Security – Bias and Fairness in AI Systems – Future Trends of AI in Business – Responsible AI Adoption.

Text Books:

1. Russell, S. & Norvig, P. – Artificial Intelligence: A Modern Approach.
2. Chaffey, D. & Ellis-Chadwick, F. – Digital Business and E-Commerce Management.
3. Davenport, T.H. & Ronanki, R. – Artificial Intelligence for the Real World.

Reference Books:

1. Stuart Russell & Peter Norvig – Artificial Intelligence: A Modern Approach, Pearson.
2. Thomas H. Davenport & Nitin Mittal – All-in on AI: How Smart Companies Win Big with Artificial Intelligence, Harvard Business Review Press

Web References:

1. <https://www.ibm.com/artificial-intelligence>
2. <https://www.microsoft.com/ai>
3. <https://www.geeksforgeeks.org/artificial-intelligence>
4. <https://www.coursera.org/learn/ai-for-everyone>

BUSINESS ANALYTICS AND DATA MANAGEMENT ELECTIVE

BB351 (BAAC01): POWER BI (Audit course)

L	P	C	INT	EXT
<u>3</u>	<u>-</u>	<u>-</u>	<u>100</u>	<u>-</u>

Course Objectives:

1. To provide fundamental knowledge of Power BI as a data visualization tool.
2. To develop practical skills in handling and transforming data.
3. To enable students to create meaningful visualizations and reports.
4. To introduce the use of dashboards for effective business communication.

Course Outcomes:

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

1. Understand BI concepts and Power BI fundamentals.
2. Plan and design Power BI projects.
3. Connect, transform, and prepare data.
4. Build data models and create calculations for analysis.

UNIT I: Understanding Business Intelligence And Power BI:

CO1(8)

Exploring key concepts of business intelligence, discovering the power bi eco system, choosing the right power bi license, introducing the power bi Desktop and the power bi service.

UNIT II: Planning Projects With Power BI:

CO2(8)

Planning power bi business intelligence projects, identifying stakeholders, goals and requirements, discovering the required data sources designing a data model, planning reports and dashboards, Explaining the example scenario.

UNIT III: Connecting To Transforming Data:

CO3(8)

Technical requirements getting Data, Transforming data, Merging, copying, and appending queries, Verifying and loading data

UNIT IV: Creating Data Models And Calculations:

CO4(8)

Technical requirements creating a data model, creating calculations, checking and troubleshooting, calculations.

Text Books:

1. Learn Power BI, 2nd edition, Greg Deckler.
2. Mastering Microsoft Power BI, Greg Deckler, Brett Powell.

Reference Books:

1. Expert Data Modeling with Power BI, Soheil Bakhshi, Christian Wade.

Web References:

1. <https://share.google/RaritKDBWFwAqQIzQ>
2. <https://share.google/ps69na4rTYvdvSWJw>

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<u>3</u>	<u>-</u>	<u>-</u>	<u>100</u>	<u>-</u>

Course Objectives:

1. To introduce the fundamentals of systems and system development.
2. To understand system analysis techniques and requirement gathering.
3. To develop knowledge of system design and modeling tools.
4. To understand system implementation and maintenance.

Course Outcomes:

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

1. Explain basic concepts of systems and system development.
2. Analyze system requirements using appropriate techniques.
3. Design systems using models and tools.
4. Understand system implementation and maintenance processes.

UNIT I: Introduction to Systems:

[CO1] (8)

Meaning of System – Types of Systems – Characteristics of a System – System Environment – Role of System Analyst – System Development Life Cycle (SDLC) – Phases of SDLC.

UNIT II: System Analysis:

[CO2] (8)

Requirement Analysis – Fact Finding Techniques (Interviews, Questionnaires, Observation) – Feasibility Study (Technical, Economic, Operational) – Tools for Analysis – Data Flow Diagrams (DFD) – Use Cases.

UNIT III: System Design:

[CO3] (8)

System Design Concepts – Logical and Physical Design – Input and Output Design – Database Design – Process Design – Introduction to UML Diagrams.

UNIT IV: System Implementation and Maintenance:

[CO4] (8)

System Implementation – Testing (Unit, Integration, System Testing) – Conversion Methods – System Documentation – System Maintenance – Types of Maintenance – Security and Control.

Text Books:

1. Elias M. Awad – Systems Analysis and Design
2. Kendall & Kendall – Systems Analysis and Design
3. Dennis, Wixom & Roth – Systems Analysis and Design

Reference Books:

1. James A. Senn – Analysis and Design of Information Systems, McGraw-Hill Education.
2. Shelly, Cashman & Rosenblatt – Systems Analysis and Design, Cengage Learning.

Web References:

1. https://www.tutorialspoint.com/system_analysis_and_design
2. <https://www.geeksforgeeks.org/software-engineering>
3. <https://www.coursera.org>