B.Com (Computer Applications)

I, II, III, IV, V & VI Semester Syllabus

(CBCS)

(w.e.f. 2026–2027)

FACULTY OF COMMERCE
OSMANIA UNIVERSITY
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2026

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B.COM (Computer Applications)
CBCS COURSE STRUCTURE
w.e.f. 2026-2027

SL.No.	*Code*	*Course Title*	*HPW*	*Credits*	*Exam Hrs*	*Marks*
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		SEMESTER – I				
1.	AEC1	English (First Language)	4	4	3 hrs	80U+20I
2.	SLS1	Second Language	4	4	3 hrs	80U+20I
3.	MJR101	Financial Accounting–I	5	5	3 hrs	80U+20I
4.	MJR102	Business Organization and Management	5	5	3 hrs	80U+20I
5.	MJR103	Fundamentals of Information Technology	3T+4P (5)	5	2 hrs	50T+35P + 15I
		Total	**23**	**23**		
		SEMESTER – II				
6.	AEC2	English (First Language)	4	4	3 hrs	80U+20I
7.	SLS2	Second Language	4	4	3 hrs	80U+20I
8.	MJR201	Financial Accounting–II	5	5	3 hrs	80U+20I
9.	MJR202	Business Laws	5	5	3 hrs	80U+20I
10.	MJR203	Programming with C & C++	3T+4P (5)	5	2 hrs	50T+35P + 15I
		Total	**23**	**23**		
		SEMESTER – III				
11.	AEC3	English (First Language)	4	4	3 hrs	80U+20I
12.	SLS3	Second Language	4	4	3 hrs	80U+20I
13.	MJR301	Advanced Accounting	5	5	3 hrs	80U+20I
14.	MJR302	Business Statistics-I	5	5	3 hrs	80U+20I
15.	MJR303	Relational Database Management System	3T+4P (5)	5	2 hrs	50T+35P + 15I
		Total	**23**	**23**		
		SEMESTER – IV				
16.	AEC4	English (First Language)	4	4	3 hrs	80U+20I
17.	SLS4	Second Language	4	4	3 hrs	80U+20I
18.	MJR401	Income Tax	5	5	3 hrs	80U+20I
19.	MJR402	Business Statistics-II	5	5	3 hrs	80U+20I
20.	MJR403	Web Technologies	3T+4P (5)	5	2 hrs	50T+35P+ 15I
		Total	**23**	**23**		
		SEMESTER – V				
21.	MJR501	**a)** Cost Accounting/ **b)** Business Economics/ **c)** Management Information Systems	5	5	3 hrs	80U+20I

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22.	MJR502	**a)** Business Ethics & Corporate Governance/ b) Auditing **c)** Mobile Applications	3T+4PR (5)	5	3 hrs/2 hrs	50T+35P + 15I/ 80U+20I
23.	MDC503 (Offered to other Students)	a) Introduction to Accounting b) Principles of Management	4	4	3 hrs	80U+20I
24.	SEC1	a) Communication Skills/ b) Professional Development Skills c) Entrepreneurship & Startups	2	2	2 hrs	40U+20I
25.	SEC2	a) Professional Development Skills/ b) Communication Skills/ c) Entrepreneurship & Startups	2	2	2 hrs	40U+20I
26.	VAC1	a) Environmental Science/ b) Cyber Security & Laws	2	2	2 hrs	40U+10I
		Total	**20**	**20**		
		SEMESTER – VI				
27.	MJR601	**a) Management Accounting/** **b)** Ecommerce c**)** Multimedia Systems	5	5	3 hrs	80U+20I
28.	MJR602	a) Theory and Practice of GST **b)** International Auditing **c)** Data Analytics	3T+4P (5)	5	2 hrs	50T+35P + 15I
29.	RMP603	Research Methodology and Project Report Writing	2T+4PR 4	4	2 hrs	40U+10I 25PR+15I S+10VV
30.	SEC3	**a**) Fundamentals of AI Tools/ b) Ability Skills (Competitive Mathematics)	2	2	2 hrs	40U+10I
31.	SEC4 (Dept. specified)	a) Computerized Accounting b) E-filing of Tax Returns and Digital Tax Compliance	2	2	2	40U+10I
32.	VAC2	a) Cyber Security & Laws/ b) Environmental Science	**2**	**2**	**2 hrs**	**40U+10I**
		Total	**20**	**20**		
		GRAND TOTAL	**132**	**132**		

THPW: Teaching Hour Per Week; ESED: End Semester Exam Duration AEC: Ability Enhancement Course; SLS: Second Language Skill; SEC: Skill Enhancement Course; MJR: Major Course ; VAC: Value Added Course; MDC: Multi-disciplinary Course; T: Theory; P: Practical; I: Internal Exam U: University Exam: RMP: Research Methodology & Project Report; PR: Project Report; IS: Internship; VV: Viva-Voce Examination.

Note: If a student opts for "a" in SEC in V Semester, the student has to opt for "a' only in VI Semester and so is the case with "b" and "c" in the case of Major/MDC papers also the rule applies.

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SUMMARY OF CREDITS

Sl. No.	Course Category	No. of Courses	Credits Per Course	Credits
1	AEC: English Language	4	4	16
2	Second Language	4	4	16
3	**SEC**	**4**	**2**	**8**
4	**MDC**	**1**	**4**	**4**
5	**VAC**	**2**	**2**	**4**
6	**RMP**	**1**	**4**	**4**
7	**MJR**	**16**	**5**	**80**
	TOTAL	**32**		**132**
	Commerce	**18**		**86**
CREDITS UNDER NON-CGPA		**NSS/NCC/Sports/Extra Curricular**	**Up to 6 (2 in each year)**	
		Summer Internship	**Up to 4 (2 in each after I & II years)**	

PO Programme Outcome

PO1 Commerce & Management Knowledge

PO2 Application of Knowledge

PO3 Analytical & Problem-Solving Skills

PO4 Communication Skills

PO5 Digital & Technological Competence

PO6 Ethical & Professional Responsibility

PO7 Decision-Making & Financial Awareness

PO8 Business & Entrepreneurial Competence

PO9 Teamwork & Interpersonal Skills

PO10 Lifelong Learning & Adaptability

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SEMESTER - I

Paper MJR 101: FINANCIAL ACCOUNTING - I

PAPER CODE: MJR101 **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

Objective: The course aims to develop a sound understanding of the principles and processes of financial accounting and enable learners to record, classify, reconcile and rectify accounting transactions and prepare financial statements of a sole proprietorship with appropriate adjustments.

Course Objectives:

The course aims to:

1. ***Develop an understanding of the fundamental concepts, principles and processes of financial accounting.***
2. ***Develop the ability to classify and systematically record business transactions*** *in journals, ledgers and subsidiary books.*
3. ***Develop the ability to identify and analyse the causes of differences between the Cash Book and Bank Statement*** *and prepare Bank Reconciliation Statements.*
4. ***Develop the ability to identify, analyse and rectify accounting errors*** *arising at different stages of the accounting cycle.*
5. ***Develop proficiency in preparing the final accounts of a sole proprietorship business*** *with appropriate accounting adjustments.*

Course Outcomes:

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

1. *Explain the fundamental concepts and principles of financial accounting and apply them in recording business transactions through journal entries.*
2. *Classify business transactions and prepare appropriate ledger accounts and subsidiary books using systematic accounting procedures.*
3. *Analyse the causes of differences between the Cash Book and Bank Statement and prepare and interpret Bank Reconciliation Statements.*
4. *Identify, analyse and rectify accounting errors at different stages of the accounting cycle using appropriate accounting procedures.*
5. *Prepare and present the final accounts of a sole proprietorship business incorporating appropriate adjustments and interpret the resulting financial information.*

UNIT-I: ACCOUNTING PROCESS:

Financial Accounting: Introduction – Definition – Evolution – Functions - Advantages and Limitations – Users of Accounting Information - Branches of Accounting – Accounting Principles: Concepts and Conventions - Accounting Standards – Meaning – Importance – List of Accounting Standards issued by ASB - Accounting System - Types of Accounts – Accounting Cycle – Journal - Ledger and Trial Balance (Including Problems)

UNIT-II: SUBSIDIARY BOOKS AND RECTIFICATION OF ERRORS:

Meaning – Types: Purchases Book - Purchases Returns Book - Sales Book - Sales Returns Book - Bills Receivable Book - Bills Payable Book – Cash Book: Single Column, Two Column, Three Column and Petty Cash Book - Journal Proper (Including Problems)

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Rectification of Errors: Types of Errors - Suspense Account – Effect of Errors on Profit (Including Problems)

UNIT-III: BANK RECONCILIATION STATEMENT:

Meaning - Need - Reasons for differences between Cash Book and Pass Book balances – Favorable and Overdraft balances – Ascertainment of correct Cash Book balance (Amended Cash Book) - Preparation of Bank Reconciliation Statement (Including Problems)

UNIT-IV: DEPRECIATION ACCOUNTING:

Depreciation (Ind-AS-16): Meaning – Causes – Difference between Depreciation, Amortization and Depletion - Objectives of providing for depreciation – Factors affecting depreciation – Accounting Treatment – Methods of Depreciation: Straight Line Method - Diminishing Balance Method and Sum of the Units Method (Including Problems)

UNIT-V: FINAL ACCOUNTS OF SOLE TRADER:

Capital and Revenue Expenditure – Capital and Revenue Receipts: Meaning and Differences - Deferred Revenue Expenditure.

Final Accounts of Sole Trader: Meaning - Uses - Preparation of Manufacturing, Trading and Profit & Loss Account and Balance Sheet – Adjustments – Closing Entries (Including problems)

SUGGESTED READINGS:

1. **Haneef, M. & Mukherjee, A. (2025).** *Accountancy – I*. New Delhi: Tata McGraw Hill Publishing Company.
2. **Gupta, R. L. & Gupta, V. K. (2025).** *Principles and Practice of Accounting*. New Delhi: Sultan Chand & Sons.
3. **Jain, S. P. & Narang, K. L. (2025).** *Accountancy – I*. New Delhi: Kalyani Publishers.
4. **Tulasian, P. C. (2025).** *Accountancy – I*. New Delhi: Tata McGraw Hill Publishing Company.
5. **Grewal, T. S. (2025).** *Introduction to Accountancy*. New Delhi: S. Chand & Company Ltd.
6. **Athma, Prashanta (2025).** *Financial Accounting – I*. Mumbai: Himalaya Publishing House Pvt. Ltd.
7. **Maheshwari, S. N. & Maheshwari, V. L. (2025).** *Advanced Accountancy – I*. New Delhi: Vikas Publishing House.
8. **Sehgal, Deepak (2025).** *Fundamentals of Financial Accounting*. New Delhi: Taxmann Publications Pvt. Ltd.
9. **Lal, Jawahar (2025).** *Financial Accounting*. Mumbai: Himalaya Publishing House Pvt. Ltd.
10. **Srinivas, Kamatam (2025).** *Financial Accounting – I*. Hyderabad: S. Publishers.
11. **Kamala Devi, Padmalatha, Dr. & Sharma, Rachana (2025).** *Financial Accounting – I*. Hyderabad: Professional Books Publishers.
12. **Kumar, K. Naveen (2025).** *Financial Accounting – I*. Hyderabad: Vedashree Publishers.

REFERENCE RESOURCES

13. **Institute of Chartered Accountants of India (2025).** *Accounting Standards and Guidance Materials*. New Delhi: The Institute of Chartered Accountants of India.
14. **Government of India (2025).** *Companies Act, 2013, as amended from time to time*. New Delhi: Ministry of Corporate Affairs.

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CO–PO Mapping

Mapping Scale:

3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

Course Outcomes / Programme Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	1	1	2	2	1	–	2
CO2	3	3	2	2	2	3	2	2	1	2
CO3	3	3	3	1	1	2	3	1	–	2
CO4	3	3	3	1	1	3	2	1	1	2
CO5	3	3	3	3	2	3	3	3	1	2

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SEMESTER - I

Paper MJR 102: BUSINESS ORGANIZATION AND MANAGEMENT

PAPER CODE: MJR102 **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

Course Objectives:

1) *To know the forms of business organization.*
2) *To understand the meaning and classification of joint stock companies.*
3) *To know the meaning and functions of management.*
4) *To study the importance of planning and organizing in a business organization.*
5) *To differentiate the concepts of authority, power, accountability, responsibility, delegation and decentralization.*

Course Outcomes:

1) *Describe and understand the forms of business organization.*
2) *Knows the forms of companies and important documents.*
3) *Equips with the application of Fayol's 14 principles of management.*
4) *Understand the benefits of planning and organizing in an organization.*
5) *Gain confidence in proper use of authority, responsibility, centralization, decentralization, coordination, cooperation and control terms.*

UNIT-I: INTRODUCTION:

Concepts of Business, Trade, Industry and Commerce - Objectives and functions of Business – Social Responsibility of a Business - Forms of Business Organization - Meaning, Characteristics, Advantages and Disadvantages of Sole Proprietorship – Meaning, Characteristics, Advantages and Disadvantages of Partnership - Kinds of Partners - Partnership Deed -Concept of Limited liability partnership – Meaning, Characteristics, Advantages and Disadvantages of Hindu Undivided Family – Meaning, Advantages and Disadvantages of Co-Operative Organization, One Person Company.

UNIT-II: JOINT STOCK COMPANY:

Joint Stock Company - Meaning - Definition - Characteristics - Advantages and Disadvantages - Kinds of Companies - Promotion - Stages of Promotion - Promoter - Characteristics - Kinds - Preparation of Important Documents - Memorandum of Association - Clauses - Articles of Association - Contents – Prospectus - Contents – Red herring Prospectus- Statement in lieu of Prospectus (As per Companies Act-2013).

UNIT-III: FUNCTIONS OF MANAGEMENT:

Management - Meaning - Characteristics - Functions of Management - Levels of Management – Organization Structure – Types of Organization Structure – Skills of Management - Scientific Management - Meaning - Definition - Objectives - Criticism – Fayol's Principles of Management.

UNIT-IV: PLANNING AND ORGANISING:

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Meaning - Definition - Characteristics - Types of Plans - Advantages and Disadvantages – Approaches to Planning - Management by Objectives (MBO) - Steps in MBO - Benefits –Weaknesses—Definition of Organizing-Organization-Process of Organizing - Principles of Organization - Formal and Informal Organizations - Line, Staff Organizations - Line and Staff Conflicts - Functional Organization - Span of Control - Meaning - Determining Span – Factors influencing the Span of Control.

UNIT-V: AUTHORITY, COORDINATION AND CONTROL:

Meaning of Authority, Power, Responsibility and Accountability - Delegation of Authority - Decentralization of Authority - Definition, Importance, Process, and Principles of Coordination - Techniques of Effective Coordination - Control - Meaning - Definition – Relationship between Planning and Control - Steps in Control – Requirements for Effective Control.

SUGGESTED READINGS:

1) R K Sharma & Shashi K. Gupta : Business Organization & Management: Kalyani Publishers
2) Patrick Anthony: Business Organization& Management: Himalaya Publishing House
3) Dr. Manish Gupta, Business Organization & Management: PBP.
4) R. D. Agarwal: Organization & Management: McGraw Hill.
5) S.A. Sherlekar, V.S. Sherlekar: Modern Business Organization: Himalaya Publishing House
6) C.R. Basu: Business Organization & Management: Tata McGraw Hill
7) M.C. Shukla: Business Organization & Management: S. Chand,
8) D.S. Vittal: Business Organization and Management: S. Chand
9) V.S.P. Rao:Organizational Behavior Text & Cases: Himalaya Publishing House
10) Uma Shekaram: Business Organization & Management: Tata McGraw Hill
11) Dr. R. Sushama, Mrs. R. Renuka: Business Organisation and Management: Vedashree Publishers.
12) Dr. R. Sridhar : Business Organisation and Management : S Publishers.
13) Sherlekar & Khuspat Jain: Business Organization& Management: Himalaya Publishing House
14) R K Chopra: Office Organization& Management: Himalaya Publishing House
15) RS Gupta & BD Sharma:Principles and Practice of Management: Kalyani Publishers
16) RK Sharma: Principles of Management: Kalyani Publishers
17) Mrs. Vinaya Chaturvedi, Ms. Ankita Nagra, Mrs. R. Anuradha & Ms. B. S. Sai Leena: Business Organization & Management: Professional Books Publishers

MJR 102: Business Organization and Management

CO–PO Mapping

Mapping Scale: 3 – High, 2 – Moderate, 1 – Low, – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	2	1	2	3	3	1	2
CO2	3	3	2	2	1	3	2	3	1	2
CO3	3	3	3	3	1	3	3	3	3	2
CO4	3	3	3	3	2	3	3	3	3	2
CO5	3	3	3	3	2	3	3	3	3	3

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SEMESTER - I

Paper MJR 103: FUNDAMENTALS OF INFORMATION TECHNOLOGY

PAPER CODE: MJR 103: **Total Marks:50T+35P+15I=100**
THPW: 5 (3T+4P) ; Credits: 5 **ESED: 2 HRS**

Objective: The course aims to develop foundational knowledge of information technology, computer systems, software, operating systems, data representation, communication and networking, and enable learners to apply basic IT skills in academic, professional and business environments.

Course Objectives

The course aims to:

1. ***Develop an understanding of the fundamental concepts, components, functions and types of computer systems*** *and their applications in business and organisational environments.*
2. ***Develop practical knowledge of number systems, computer arithmetic, data representation and storage fundamentals*** *and their applications in computing.*
3. ***Develop an understanding of system software and application software*** *and their roles in supporting computing and business activities.*
4. ***Explain the functions and types of operating systems and system utilities*** *and develop an understanding of their role in managing computer resources and processing tasks.*
5. ***Develop foundational knowledge of data communication, computer networks, networking hardware and network topologies*** *and their applications in information sharing and Business Communication.*

Course Outcomes:

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

1. *Identify and explain the major components, functions and types of computer systems and relate their applications to academic and business environments.*
2. *Perform conversions and basic arithmetic operations using different number systems and explain fundamental concepts of data representation and storage.*
3. *Distinguish between system software and application software and identify their roles and applications in computing and business environments.*
4. *Explain the functions and types of operating systems, system utilities and processing techniques and relate them to effective computer resource management.*
5. *Explain basic data communication and networking concepts and identify common networking devices, transmission media and network topologies.*

UNIT I: FOUNDATIONS OF COMPUTING & DIGITAL BUSINESS:

Introduction to Digital Transformation in Business - Strategic Role of IT in Functional Areas (Finance, Marketing, HR, SCM) - **Components of a Computer System:** Hardware (CPU, RAM/ROM), Software (System & Application) - **Input/output Devices:** From keyboards & printers to biometric & IoT devices - Bits, Bytes & Data Representation -**Ethical & Social Aspects:** Digital privacy (GDPR, India's DPDPA), Digital divide, Intellectual property - **Emerging Technologies Overview:** AI, ML, IoT, Block chain, RPA (conceptual)

UNIT II: DATA, STORAGE & LOGICAL FOUNDATIONS:

Binary Logic: Binary system, AND, OR, NOT (basic illustrations) - **Types of Storage:** RAM, ROM, SSD, HDD, Flash Drives - **Cloud vs. Local Storage:** Applications in Business - **File**

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Systems & Organization: Files, folders, extensions - **Conceptual Database Overview:** Tables, Fields, Records - **Organizing Business Data:** Numeric/Text/Date, basic tabular format - Role of Data in Business Decision-Making

UNIT III: SOFTWARE APPLICATIONS FOR BUSINESS:

Operating Systems: Functions, types (Windows, Linux, MacOS, Android, iOS) - **Utility Software:** Antivirus, Backup, File compression, System clean-up tools - **Word Processing:** Formatting, tables, mail merge, collaborative editing - **Spreadsheets:** Formulas (SUM, AVERAGE, IF, VLOOKUP), data charts, validation, pivot tables - **Presentations:** Design, transitions, multimedia integration - **Enterprise Software:** ERP (basic modules and benefits), **(a) CRM:** Customer interaction management, **(b) DBMS:** Use cases in business operations - **Software as a Service (SaaS):** Cloud-based app delivery model

UNIT IV: NETWORKING & INTERNET IN BUSINESS:

Basics of Networking: LAN, WAN, WLAN, Internet - Network Topologies (Star, Bus, Ring, Mesh - conceptual) - **Devices:** Routers, Switches, Modems (roles and applications) - Client-Server Architecture - **Internet Fundamentals:** IP, DNS, URLs, Browsers, Search Engines - **E-Commerce Basics:** Models and relevance - Social Media in Business - **Data Communication:** Wired (Ethernet, Fiber), Wireless (Wi-Fi, Bluetooth) - Bandwidth & Speed Concepts (bps, Mbps, Gbps)

UNIT V: CLOUD COMPUTING & CYBERSECURITY:

Cloud Computing: Concepts, characteristics, advantages - **Service Models:** SaaS, PaaS, IaaS - **Deployment Models:** Public, Private, Hybrid - **Cyber security Essentials: Types of threats:** Malware, Phishing, DoS attacks - **Protective Measures:** Strong passwords, MFA, antivirus, firewalls - Data Backup and Recovery - Safe Browsing Practices - Introduction to Cyber Laws & Data Privacy Regulations (GDPR, India's DPDPA)

SUGGESTED READINGS:

1. **Kumar, Puneet & Bhardwaj, S. (2025).** *Fundamentals of Information Technology*. New Delhi: Kalyani Publishers.
2. **Sinha, P. K. (2025).** *Computer Fundamentals*. New Delhi: BPB Publications.
3. **Reddy, G. Kavitha (2025).** *Fundamentals of Information Technology*. Hyderabad: S. Publishers.
4. **Jayalaxmi, Dr. & Others (2025).** *Fundamentals of Information Technology*. Hyderabad: Professional Books Publishers.
5. **Renuka, R. (2025).** *Fundamentals of Information Technology*. Hyderabad: Vedashree Publishers.
6. **Kandula, Tulasi Ram (2025).** *Fundamentals of Information Technology*. Mumbai: Himalaya Publishing House Pvt. Ltd.
7. **Murthy, C. S. V. (2025).** *Fundamentals of Computers*. Mumbai: Himalaya Publishing House Pvt. Ltd.
8. **Bandaru, Ramakrishna & Seetal, J. (2025).** *Fundamentals of Information Technology*. New Delhi: Tata Publications.

REFERENCE RESOURCES

9. **Department of Electronics and Information Technology (2025).** *Digital Literacy and Information Technology Resources*. Government of India, New Delhi.

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10. **Ministry of Electronics and Information Technology (2025).** *Information Technology and Digital India Resources*. Government of India, New Delhi.

MJR 103: FUNDAMENTALS OF INFORMATION TECHNOLOGY

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	**3**	1	2	2	1	3
CO2	3	3	**3**	1	**3**	1	2	1	1	3
CO3	3	3	2	2	**3**	1	2	3	1	3
CO4	3	3	**3**	2	**3**	2	2	2	1	3
CO5	3	3	**3**	**3**	**3**	2	2	3	2	3

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SEMESTER - II

Paper MJR 201: FINANCIAL ACCOUNTING-II

PAPER CODE: MJR 201 **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

OBJECTIVE: The course aims to develop advanced accounting knowledge and practical skills in recording, processing and interpreting financial transactions relating to bills of exchange, consignment, joint ventures, incomplete records and non-profit organisations, and to enable learners to apply accounting principles and standards in preparing and interpreting financial information.

Course Objectives:
The course aims to:

1. ***Develop proficiency*** *in the accounting treatment of bills of exchange, consignment transactions and joint venture transactions.*
2. ***Develop the ability*** *to analyse incomplete accounting records and apply the single-entry system to ascertain missing information and prepare financial statements.*
3. ***Develop competence*** *in accounting for non-profit organisations and in preparing appropriate financial statements.*
4. ***Enable learners to apply*** *relevant accounting principles and standards to business transactions and financial events.*
5. ***Develop analytical and interpretative skills*** *for evaluating financial information and financial statements of different types of organisations.*

Course Outcomes:
Upon successful completion of the course, the learner will be able to:

1. *Prepare and maintain appropriate accounting records for bills of exchange, consignment transactions and joint venture transactions using relevant accounting procedures.*
2. *Analyse incomplete accounting records, reconstruct necessary accounting information and convert single-entry records into a double-entry system for preparing financial statements.*
3. *Prepare financial statements of non-profit organisations, including the Receipts and Payments Account, Income and Expenditure Account and Balance Sheet.*
4. *Apply relevant accounting principles and standards to the recognition, measurement and presentation of business transactions and financial events.*
5. *Analyse and interpret financial statements and accounting information of different types of organisations to support informed financial and managerial decision-making.*

UNIT-I: BILLS OF EXCHANGE:

Bills of Exchange – Definition - Distinction between Promissory note and Bills of exchange -Accounting treatment of Trade bills: Books of Drawer and Acceptor- Honour and Dishonour of Bills - Renewal of bills - Retiring of bills under rebate – Endorsement of bills - Accommodation bills (Including problems)

UNIT-II: CONSIGNMENT ACCOUNTS:

Consignment - Meaning – Features - Proforma invoice - Account sales - Del credere commission- Accounting treatment in the books of the consignor and the consignee - Valuation of consignment stock (Focusing on proportionate non-recurring expenses) - Treatment of Normal and abnormal Loss - Invoice of goods at a price higher than the cost price (Including problems)

UNIT-III: JOINT VENTURE ACCOUNTS:

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Joint Venture - Meaning – Features - Difference between Joint Venture and Consignment -Accounting Procedure - Methods of Keeping Records for Joint Venture Accounts - Method of Recording in co-ventures books (When separate books are not maintained) - Separate Set of Books Method - Joint Bank Account – Brief overview of Memorandum Joint Venture Account (Including problems)

UNIT-IV: ACCOUNTS FROM INCOMPLETE RECORDS:

Single Entry System - Meaning – Features - Difference between Single Entry and Double Entry systems - Defects in Single Entry System - Books and accounts maintained - Ascertainment of Profit - Statement of Affairs Method - Conversion method (Preparing complete trading, Profit and Loss Account and Balance Sheet (Including problems)

UNIT-V: ACCOUNTING FOR NON-PROFIT ORGANIZATIONS:

Non- Profit Organization - Meaning - Features - Receipts and Payments Account - Income and Expenditure Account - Balance Sheet Treatment of special items like Entrance Fees, Donations, Legacy, etc. – Calculation of consumption of consumables (E.g., Stationary, Medicines) and Stock adjustments (Including problems)

SUGGESTED READINGS:

1. **Haneef, M. & Mukherjee, A. (2025).** *Accountancy – I*. New Delhi: Tata McGraw Hill Publishing Company.
2. **Gupta, R. L. & Gupta, V. K. (2025).** *Principles and Practice of Accounting*. New Delhi: Sultan Chand & Sons.
3. **Tulasian, P. C. (2025).** *Accountancy – I*. New Delhi: Tata McGraw Hill Publishing Company.
4. **Athma, Prashanta (2025).** *Financial Accounting – I*. Mumbai: Himalaya Publishing House Pvt. Ltd.
5. **Chaitanya, K. Krishna & Kamala Devi (2025).** *Financial Accounting*. New Delhi: Kalyani Publishers.
6. **Jain, S. P. & Narang, K. L. (2017).** *Financial Accounting – II*. 2nd Revised Edition. New Delhi: Kalyani Publishers.
7. **Maheshwari, S. N. & Maheshwari, V. L. (2025).** *Advanced Accountancy – I*. New Delhi: Vikas Publishing House.
8. **Srinivas, M. & Reddy, K. Sreelatha (2025).** *Advanced Accountancy*. Mumbai: Himalaya Publishing House Pvt. Ltd.
9. **Arora, M. N. (2025).** *Financial Accounting*. New Delhi: Taxmann Publications Pvt. Ltd.
10. **Srinivas, Kamatam (2025).** *Financial Accounting – II*. Hyderabad: S. Publications.
11. **Archana, K. & Subhashini, P. (2025).** *Financial Accounting – II*. 1st Edition. Hyderabad: S. V. Publications.
12. **Yogeshwaran & Sastry, E. V. Chandramohan (2018).** *Financial Accounting – II*. New Edition, 2025. Hyderabad: Professional Books Publishers.
13. **Sahai, Prabhu, Sheela, Mary Vinaya & Others (2025).** *Financial Accounting – II*. New Delhi: DL Publishers and Distributors.

CO–PO Mapping

Mapping Scale:

3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

Course Outcomes / Programme Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	1	1	2	2	1	–	2
CO2	3	3	2	2	2	3	2	2	1	2
CO3	3	3	3	1	1	2	3	1	–	2
CO4	3	3	3	1	1	3	2	1	1	2
CO5	3	3	3	3	2	3	3	3	1	2

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SEMESTER - II

Paper MJR 202: BUSINESS LAWS

PAPER CODE: MJR 202 **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

OBJECTIVE: *The course aims to develop an understanding of the fundamental principles of business and corporate laws in India and enable learners to apply relevant legal provisions to contracts, sale of goods, consumer protection, intellectual property, company management, corporate governance, insolvency and liquidation.*

Course Objectives:

The course aims to:

1. ***Develop an understanding of the fundamental principles and provisions of the Indian Contract Act, 1872,*** *and their application to business transactions.*
2. ***Develop knowledge of the key provisions of the Sale of Goods Act, 1930, and the Consumer Protection Act, 2019,*** *and their relevance to business and consumer rights.*
3. ***Develop an understanding of Intellectual Property Rights and their legal protection,*** *including trade marks, patents, copyrights, industrial designs, trade secrets and geographical indications, along with an awareness of digital IPR under the Information Technology Act, 2000, as amended from time to time.*
4. ***Develop knowledge of the legal framework governing company formation, management, meetings and corporate governance*** *under the Companies Act, 2013.*
5. ***Develop an understanding of the legal framework governing corporate insolvency, resolution and liquidation*** *under the Insolvency and Bankruptcy Code, 2016.*

Course Outcomes:

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

1. *Explain, analyse and apply the fundamental principles of the Indian Contract Act, 1872, to business transactions and contractual relationships.*
2. *Analyse the key provisions of the Sale of Goods Act, 1930, and the Consumer Protection Act, 2019, and apply them to business and consumer-related situations.*
3. *Identify and explain different Intellectual Property Rights and their protection, including trade marks, patents, copyrights, industrial designs, trade secrets and geographical indications, with basic awareness of digital IPR and relevant provisions of the Information Technology Act, 2000.*
4. *Explain and apply relevant provisions of the Companies Act, 2013, relating to company formation, management, meetings and corporate governance.*
5. *Explain and analyse the legal framework and processes relating to corporate insolvency, resolution and liquidation under the Insolvency and Bankruptcy Code, 2016.*

UNIT–I: INDIAN CONTRACT ACT, 1872:

Agreement and Contract : Definition - Essentials of a valid contract - Types of contracts (Valid Void Voidable, Unenforceable, Quasi-Contracts) – Formation of Contract: Offer and Acceptance - Essentials of valid offer and acceptance - Communication and revocation – Capacity and Consent: Competency to contract Free Consent (Coercion, Undue influence, Fraud, Misrepresentation, Mistake) – Consideration and Legality: Definition - Essentials of valid consideration (Nudum pactum), Agreements Declared Void (Restraint of Trade, Legal Proceedings) – Discharge and Breach: Modes of Discharge of a contract – Breach of Contract (Actual and Anticipatory)- Remedies for Breach (Damages, Specific Performance, Injunction, Rescission - Special Contracts (Introduction) – Overview of Contract Indemnity and Contract Guarantee.

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UNIT–II: SALE OF GOODS ACT, 1930 AND CONSUMER PROTECTION ACT, 2019:

The Sale of Goods Act, 1930: Contract of Sale - Essentials of Valid Sale - Sale and Agreement to Sell – Definition and Types of Goods. Stipulations: Conditions and Warranties (Implied and Express) - Caveat Emptor and its Exceptions. Transfer of Title: Rules regarding Transfer of Property – Rights of Unpaid Seller: Definition of an Unpaid Seller - Rights of Unpaid Seller – Against the Goods and Against the Buyer personally. Consumer Protection Act, 2019 (Latest Act) Core Concepts: Definition of Consumer (Includes E-Commerce) - Goods - Service - Consumer Dispute – Unfair Trade Practices – Misleading Advertisement and Product Liability. Institutional Framework: Introduction to the Central Consumer Protection Authority (CCPA). Redressal Agencies: Consumer Dispute Redressal Commissions (District, State, National) - Compositions and Latest Monitory Jurisdiction Limits, E-Commerce and Digital Age: Key Provision of the Consumer Protection (E-Commerce) Rules, 2020 (e.g., Liability of Market Place vs. Inventory Model.

UNIT – III: INTELLECTUAL PROPERTY RIGHTS (IPRs):

Trade Marks: Definition – Functions – Procedure for Registration – Duration and Renewal – Infringement and Passing Off.

Patents: Definition – Kinds of Patents – Patentable and Non-Patentable Inventions – Rights of the Patentee – Transfer of Patent Rights – Infringement.

Copyright: Definition – Rights of the Copyright Owner – Term of Copyright – Infringement – Fair Dealing.

Other Intellectual Property Rights: Introduction to Designs Act, 2000 – Trade Secrets – Geographical Indications (GI).

Information Technology and Digital IPR: Information Technology Act, 2000, as amended from time to time – Electronic Records and Electronic Signatures – E-Contracts – Cyber Offences – Digital Transactions – IPR Protection in the Digital Environment.

UNIT–IV: MANAGEMENT OF COMPANIES AND CORPORATE GOVERNANCE:

Directors: Qualification - Disqualification – Position (Fiduciary) - Appointment (First Subsequent) - Removal - Duties and Liabilities – Loans and Directors – Independent Director (Brief Note) - Corporate Governance: Meaning – Need and Key Principles- Corporate Social Responsibility (CSR) – Provisions of Section135 of the Companies Act, 2013 Applicability – Composition of CSR Committee – Mandatory 2% Spending and Treatment of unspent amount –Meetings: Meaning - Requisites of Valid Meeting (Notice, Proxy, Agenda, Quorum) – Resolutions (Ordinary, Special) - Kinds of Meetings – Annual General Meeting (AGM) - Extraordinary General Meeting - Board Meetings (Frequency and Rules).

UNIT–V: CORPORATE INSOLVENCY AND WINDING UP:

Winding up under Companies Act, 2013: Meaning - Modes of Winding Up (Primarily Winding Up by tribunal on non-insolvency grounds like Fraud, Oppression) - Removal of name of the company (Striking Off) – Conditions and Procedure under the Companies Act. Insolvency and Bankruptcy code – 2016: Objective and Applicability – The Process – Overview of the Corporate Insolvency Resolution Process (CIRP) –Key Functionaries: National Company Law Tribunal (NCLT) – Committee of Creditors (CoC) – Insolvency Professional (IP) – Liquidation: Grounds for Liquidation and Brief on the Distribution of Assets (Order of Priority).

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SUGGESTED READINGS:

1. **Kapoor, N. D. (2025).** *Company Law*. New Delhi: Sultan Chand & Sons.
2. **Rajashree (2025).** *Company Law*. Mumbai: Himalaya Publishing House Pvt. Ltd.
3. **Krishna, Kavitha (2025).** *Business Law*. Mumbai: Himalaya Publishing House Pvt. Ltd.
4. **Hussain, B. K. & Nagalakshmi (2025).** *Business Laws*. New Delhi: Professional Books Publishers.
5. **Sareen, V. K. (2020).** *Business Law*. 1st Edition. New Delhi: Kalyani Publishers.
6. **Krishna Murthy, G. & Kavitha, G. (2025).** *Company Law*. New Delhi: Professional Books Publishers.
7. **Kapoor, G. K. & Dhamija, Sanjay (2025).** *Company Law and Practice*. New Delhi: Taxmann Publications Pvt. Ltd.
8. **Sekhar, Indrakanti & Bhavani, Tulja (2025).** *Business Law*. Hyderabad: SIA Publishing & Distributors Pvt. Ltd.
9. **Garg, K. C., et al. (2025).** *Company Law: Revised as per the Companies Act, 2013*. New Delhi: Kalyani Publishers.
10. **Gogna, P. P. S. (2025).** *Corporate Law*. New Delhi: S. Chand & Company Ltd.
11. **Vittal, D. S. (2025).** *Business Law*. New Delhi: S. Chand & Company Ltd.
12. **Bagrial, A. K. (2025).** *Company Law*. New Delhi: Vikas Publishing House.
13. **Hussain, B. K. & Gopal Rao, S. (2020).** *Business Law*. Edition 2024. Hyderabad: Professional Books Publishers.
14. **Madhavi, A. V. R. & Bhaskara Lakshmi, D. (2025).** *Business Laws*. 1st Edition. Hyderabad: S. V. Publications.
15. **Bavya, S. P. Neehalika (2025).** *Business Laws*. Hyderabad: S. Publishers.
16. **Saritha, D. & Sahai, Prabhu (2025).** *Business Laws*. New Delhi: DL Publishers and Distributors.

REFERENCE LEGISLATION

17. **Government of India (2025).** *The Indian Contract Act, 1872*. New Delhi: Government of India.
18. **Government of India (2025).** *The Sale of Goods Act, 1930*. New Delhi: Government of India.
19. **Government of India (2025).** *The Consumer Protection Act, 2019*. New Delhi: Government of India.
20. **Government of India (2025).** *The Companies Act, 2013*. New Delhi: Ministry of Corporate Affairs.
21. **Government of India (2025).** *The Insolvency and Bankruptcy Code, 2016*. New Delhi: Government of India.
22. **Government of India (2025).** *The Information Technology Act, 2000, as amended from time to time*. New Delhi: Government of India.

MJR 202: BUSINESS LAWS

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	3	1	3	3	2	1	2
CO2	3	3	3	3	1	3	3	3	1	2
CO3	3	3	3	2	2	3	2	3	1	3
CO4	3	3	3	3	2	3	3	3	2	3
CO5	3	3	3	3	1	3	3	3	1	3

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SEMESTER - II

Paper MJR 203: PROGRAMMING WITH C & C++

PAPER CODE: MJR 203: **Total Marks:50T+35P+15I=100**

THPW: 5 (3T+4P) ; Credits: 5 **ESED: 2 HRS**

Objective: The course aims to develop fundamental programming skills using C and C++ and enable learners to design, implement, test and debug structured and object-oriented programs for solving computational and practical problems.

Course Objectives:

The course aims to:

1. ***Develop an understanding of the fundamental concepts, syntax and programming constructs of the C programming language*** *and their application in developing structured programs.*
2. ***Develop programming skills using control statements, loops, functions, arrays and strings*** *to solve computational and business-related problems.*
3. ***Develop an understanding of pointers, structures and unions in C*** *and their application in managing and processing data efficiently.*
4. ***Develop an understanding of object-oriented programming concepts using C++****, including classes, objects, encapsulation, abstraction, inheritance and polymorphism.*
5. ***Develop computational thinking, problem-solving, program design, testing and debugging skills*** *using C and C++ programming languages.*

Course Outcomes:

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

1. *Develop and execute basic C programs using variables, data types, operators, expressions, input/output statements and fundamental programming constructs.*
2. *Design and implement C programs using control statements, loops, functions, arrays and strings to solve computational and practical problems.*
3. *Apply pointers, structures and unions in C to design programs for efficient data handling and problem-solving.*
4. *Develop C++ programs using object-oriented programming concepts such as classes, objects, encapsulation, abstraction, inheritance and polymorphism.*
5. *Analyse, test and debug C and C++ programs and apply systematic problem-solving approaches to develop efficient solutions for practical problems.*

UNIT-I: INTRODUCTION TO C LANGUAGE, VARIABLES, DATA TYPES AND OPERATORS:

Introduction: Types of Languages- History of C language – Basic Structure –Programming Rules – Flow charts-algorithms–Commonly used library functions - Executing the C Program - Pre-processors in "C"- Keywords & Identifiers – Constants – **Variables:** Rules for defining variables - Scope and Life of a Variable –- **Data types** - Type Conversion - Formatted Input and Output operations. **Operators:** Introduction – Arithmetic – Relational – Logical – Assignment - Conditional - Special - Bitwise - Increment / Decrement operator.

UNIT-II: WORKING WITH CONTROL STATEMENTS, LOOPS:

Conditional statements: Introduction - If statements - If-else statements – nested if-else – break statement-continue statement-go to statement-Switch statements. **Looping statements:** Introduction- While statements – Do-while statements - For Statements-nested loop statements.

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UNIT-III: FUNCTIONS, ARRAYS AND STRINGS:

Functions: Definition and declaration of functions- Function proto type-return statement- types of functions-formatted and unformatted functions. **Built in functions:** Mathematical functions – String functions – Character functions – Date functions. **User defined functions:** Introduction – Need for user defined functions – Elements of functions – Function call – call by value and call by reference – Recursive functions. **Arrays:** Introduction – Defining an array – Initializing an array –characteristics of an array- One dimensional array – Two dimensional array – Multi dimensional array. **Strings:** Introduction – Declaring and initializing string – Reading and Writing strings – String standard functions.

UNIT-IV: POINTERS, STRUCTURES AND UNIONS:

Pointers: Features of pointers- Declaration of Pointers-arithmetic operations with pointers

Structures: Features of Structures - Declaring and initialization of Structures –Structure within Structure-Array of Structures- Enumerated data type-**Unions**- Definition and advantages of Unions comparison between Structure & Unions.

UNIT-V: OBJECT ORIENTED CONCEPTS USING C++:

Object Oriented Programming: Introduction to Object Oriented Programming - Structure of C++ – Simple program of C++– Storage Classes- Similarities and Differences between C & C++ - Data Members-Member Functions - Object Oriented Concepts- Class-Object-Inheritance-Polymorphism-Encapsulation-Abstraction.

SUGGESTED READINGS:

1. **Sekhar, Indrakanti, Raman, V. V. R. & Battu, V. N. (2025).** *Programming with C & C++*. Mumbai: Himalaya Publishing House Pvt. Ltd.
2. **Shalini, M. (2020).** *Programming with C & C++*. 1st Edition. New Delhi: Kalyani Publishers.
3. **Balagurusamy, E. (2025).** *Programming in ANSI C*. New Delhi: McGraw Hill.
4. **Venugopal, K. R. (2025).** *Mastering C*. New Delhi: McGraw Hill.
5. **Schildt, H. (2025).** *C: The Complete Reference*. New Delhi: McGraw Hill.
6. **Kanetkar, Y. (2025).** *Let Us C*. Mumbai: BPB Publications.
7. **Balagurusamy, E. (2025).** *Object-Oriented Programming with C++*. New Delhi: McGraw Hill.
8. **Venugopal, K. R. & Buyya, R. (2025).** *Mastering C++*. New Delhi: McGraw Hill.
9. **Hubbard, John R. (2025).** *Schaum's Outline of Programming with C++*. New York: McGraw Hill.
10. **Kanetkar, Y. (2025).** *Let Us C++*. Mumbai: BPB Publications.
11. **Reddy, G. Kavitha, Rao, G. Srinivas & Shaheen, Mubeena (2025).** *Programming with C & C++*. Hyderabad: S. Publishers.
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13. **Saraswathi, K. V. R., Jayalakshmi, S. & Sudha, M. (2020).** *Programming with C++*. 2025 Edition. Hyderabad: Professional Books Publishers.
14. **Bhaskar, N. Uday & Bargada, Sambasiva Rao (2025).** *Programming with C & C++*. New Delhi: DL Publishers and Distributors.
15. **Renuka, R. (2025).** *Programming with C & C++*. Hyderabad: Vedashree Publishers.

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REFERENCE RESOURCES

16. **ISO/IEC (2025).** *Programming Language C – International Standard*. Geneva: International Organization for Standardization.
17. **ISO/IEC (2025).** *Programming Language C++ – International Standard*. Geneva: International Organization for Standardization.

MJR 203: PROGRAMMING WITH C & C++

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	1	**3**	1	2	2	1	3
CO2	3	3	**3**	1	**3**	1	2	3	1	3
CO3	3	3	**3**	1	**3**	1	2	2	1	3
CO4	3	3	**3**	1	**3**	1	2	**3**	1	3
CO5	3	3	**3**	2	**3**	2	3	**3**	2	**3**

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SEMESTER - III

Paper MJR 301: ADVANCED ACCOUNTING

PAPER CODE: MJR 301 **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

Objective: To enable undergraduate students to acquire comprehensive, advanced accounting knowledge concerning partnership frameworks and joint stock companies.

Course Objectives:

The course aims to:

1. ***Develop an understanding of partnership accounting*** *relating to admission, retirement, death of partners, changes in partnership agreements, and adjustments in capital and profit-sharing arrangements.*
2. ***Develop competency in accounting for dissolution and insolvency of partnership firms****, including realization of assets, settlement of liabilities, insolvency of partners, and piecemeal distribution of cash.*
3. ***Provide an understanding of corporate accounting practices*** *relating to the issue, forfeiture, re-issue and redemption of shares and debentures in accordance with the applicable provisions of the Companies Act, 2013.*
4. ***Develop the ability to prepare company financial statements*** *in accordance with statutory requirements, including the relevant provisions of Schedule III of the Companies Act, 2013.*
5. ***Develop analytical skills in the valuation of goodwill and shares*** *using appropriate accounting and financial valuation methods.*

Course Outcomes:

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

1. ***Apply partnership accounting principles*** *to record and account for the admission, retirement and death of partners, including adjustments relating to goodwill, revaluation, reserves, accumulated profits and changes in capital.*
2. ***Prepare accounts relating to the dissolution and insolvency of partnership firms****, including Realisation Account, Partners' Capital Accounts and Cash/Bank Account, and apply the* ***Garner v. Murray rule*** *and methods of piecemeal distribution, wherever applicable.*
3. ***Account for corporate securities*** *by recording transactions relating to the issue, forfeiture and re-issue of shares and the issue and redemption of debentures in accordance with the* ***Companies Act, 2013*** *and applicable accounting requirements.*
4. ***Prepare company financial statements*** *in accordance with the prescribed format and disclosure requirements of* ***Schedule III of the Companies Act, 2013****, including the determination and allocation of profits earned prior to incorporation.*
5. ***Calculate and interpret the value of goodwill and shares*** *using appropriate valuation techniques, including the* ***Average Profits, Super Profits, Capitalisation, Net Assets and Yield Value methods****.*

UNIT - I: PARTNERSHIP ACCOUNTS - I (OPERATIONAL & OWNERSHIP TRANSITIONS):

Foundations of Partnership: Meaning, Legal Framework of the Indian Partnership Act, 1932; Essential clauses and significance of a Partnership Deed; Maintenance of Capital Accounts — Fixed Capital Method vs. Fluctuating Capital Method; Accounting for Interest on Capital, Interest on Drawings, Salaries, and Commission to partners.

Admission of a Partner: Calculation of New Profit Sharing Ratio and Sacrificing Ratio; Treatment of Goodwill (Premium Method, Revaluation Method, and Memorandum Revaluation Method); Valuation and accounting treatment of accumulated profits, unrecorded assets, reserves, and revaluation of assets and liabilities; Adjustment of Partner Capitals based on new ratios.

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Retirement and Death of a Partner: Calculation of New Profit Sharing Ratio and Gaining Ratio; Revaluation of assets/liabilities and treatment of goodwill upon retirement; Accounting treatment for the transfer of a retiring partner's balance to a Loan Account; Accounting for the Death of a Partner: Computation of a deceased partner's share of profit up to the date of dissolution (Excluding Joint Life Policy calculations) *(Theory and Numericals)*.

UNIT - II: PARTNERSHIP ACCOUNTS - II (DISSOLUTION, INSOLVENCY & CORPORATE CONVERSION):

Dissolution of Partnership Firms: Meaning and Legal distinction between the dissolution of a partnership and the dissolution of a firm; Statutory provisions for the settlement of accounts upon dissolution (Section 48 of the Indian Partnership Act); Preparation of Realisation Account, Partner's Loan Account, Partner's Capital Accounts, and Cash/Bank Account.

Insolvency of Partners: Advanced application of the **Garner vs. Murray rule** (Distribution of capital deficiency caused by insolvency among solvent partners); Accounting treatment excluding the case of insolvency of all partners simultaneously.

Piecemeal Distribution & Corporate Sale: Piecemeal distribution of cash assets to partners during gradual liquidation (Maximum Loss Method and Surplus Capital Method); Conversion and sale of an ongoing partnership firm to a Limited Joint Stock Company — Computation of Purchase Consideration and final closing books of accounts of the firm *(Theory and Numericals)*.

UNIT - III: CORPORATE EQUITY, DEBT ARCHITECTURE & SHARE CAPITAL LOGISTICS

Issue of Shares: Overview of the Share Capital structure of corporate entities; Accounting mechanics for the issue of equity and preference shares at Par and Premium; Strict compliance with Section 52 of the Companies Act, 2013 regarding the statutory utilization of the Securities Premium Account; Pro-rata allotment mechanics, handling of calls-in-arrears and calls-in-advance.

Forfeiture & Capital Optimization: Accounting for the Forfeiture of shares and the Re-issue of forfeited shares under varied conditions; Deletion of discount issuances as per Section 53.

Debentures & Capital Reserve Allocations: Issue of Debentures — Accounting entries for the issue of debentures with explicit conditions of redemption (at par, premium); Underwriting of Shares and Debentures: Statutory provisions, determining underwriters' absolute and contingent liabilities (Gross, Net, and Marked applications); Bonus Shares: Meaning, Purpose, SEBI Guidelines for bonus issues, sources of capitalization, and accounting entry design *(Theory and Numericals)*.

UNIT - IV: COMPANY FINAL ACCOUNTS & PRE-INCORPORATION RESTRUCTURING:

Company Final Accounts Framework: Structure and statutory mandates of the **Companies Act, 2013**; Thorough analysis and application of **Schedule III (Division I)**; General instructions, formats, and structural protocols for the presentation of the Corporate Balance Sheet (Part-I) and the Statement of Profit and Loss (Part-II).

Corporate Financial Reporting: Preparation of standard corporate Final Accounts including comprehensive modern adjustments (Current Corporate Tax provisions, Transfer to statutory Reserves, Managerial Remuneration adjustments, and Dividend Distribution constraints).

Profits Prior to Incorporation: Conceptual understanding of pre-incorporation and post-incorporation trading horizons; Principles governing the allocation of income and expenses between pre- and post-incorporation phases using Time Basis, Turnover Basis, and Specific Weighted Allocation methods; Accounting treatment and balance sheet presentation of pre-incorporation profits/losses *(Theory and Numericals)*.

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UNIT - V: VALUATION OF GOODWILL AND SHARES:

Valuation of Goodwill: Meaning, features, and corporate/regulatory circumstances necessitating the valuation of goodwill; Comprehensive methods of calculation: Average Profits Method (Simple and Weighted), Super Profits Method, and Capitalization Methods (Capitalization of Average Profits vs. Capitalization of Super Profits).

Valuation of Shares: Fundamental corporate needs for share pricing and asset valuation; Analytical methods of share valuation: Net Assets Method (Intrinsic Value factoring revalued assets), Yield Basis Method (Earning Capacity and Dividend Yield), and Fair Value Method; Interpreting valuation discrepancies between asset-backed and earning-backed assessment models *(Theory and Numericals)*.

SUGGESTED READINGS:

1. **Gupta, R. L., & Gupta, V. K. (2025).** *Principles and Practice of Accounting*. Sultan Chand & Sons, New Delhi.
2. **Jain, S. P., & Narang, K. L. (2025).** *Advanced Accounting*. Kalyani Publishers, New Delhi. Reprinted 2025.
3. **Agarwal, B. M., & Gupta, M. P. (2022).** *Advanced Accountancy, Volumes I & II*. Sultan Chand & Sons, New Delhi.
4. **Gupta, R. L., & Radhaswamy, M. (2005).** *Advanced Accountancy: Theory, Method and Application*. 11th Revised Edition. Sultan Chand & Sons, New Delhi.
5. **Maheshwari, S. N., & Maheshwari, V. L. (2010).** *Advanced Accountancy, Vol. II*. Vikas Publishing House, New Delhi.
6. **Yogeshwaran, G., & Allen, Julia. (2025).** *Advanced Accountancy*. PBP Publications, Hyderabad.
7. **Tulsian, P. C. (2025).** *Accountancy – III*. McGraw Hill Education (India) Pvt. Ltd., New Delhi.
8. **Arulanandam, M. A., & Raman, K. S. (2023).** *Advanced Accountancy*. 7th Edition. Himalaya Publishing House, Mumbai.
9. **Jain, S. P., & Narang, K. L. (2019).** *Advanced Accountancy – II*. 22nd Revised Edition. Kalyani Publishers, New Delhi.
10. **Srinivas, Kamatam. (2025).** *Advanced Accounting*. S. Publishers, Hyderabad.
11. **Anwar, Sumera, Sunitha, B., & Reddy, Y. Venkat. (2025).** *Advanced Accounting*. 1st Edition. S.V. Publications, Hyderabad.
12. **Institute of Chartered Accountants of India (ICAI). (2011).** *Guidance Note on the Revised Schedule VI to the Companies Act, 1956*. The Institute of Chartered Accountants of India, New Delhi.
13. **Sharma, D. G. (2014).** *Advanced Accounting (IPCC)*. 2nd Edition. Taxmann Publications Pvt. Ltd., New Delhi.
14. **Rao, M. Thirmal, Reddy, K. Sreelatha, Sireesha, K. Naga, & Santhi, V. (2026).** *Advanced Accounting: Semester III, Telangana University*. 1st Edition. Himalaya Publishing House, Mumbai.
15. **Reddy, K. Sreelatha, Srinivas, M., & others. (2025).** *Advanced Accountancy*. Himalaya Publishing House, Mumbai.

MJR 301: ADVANCED ACCOUNTING

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	2	1	3	3	2	1	2
CO2	3	3	3	2	1	3	3	2	1	2
CO3	3	3	3	2	2	3	3	2	1	3
CO4	3	3	3	3	2	3	3	3	1	3
CO5	3	3	3	3	2	3	3	3	1	3

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SEMESTER - III

Paper MJR 302: BUSINESS STATISTICS -I

PAPER CODE: MJR 302 **Max. Marks: 80U +20I=100**

THPW: 5; Credits: 5 **ESED: 3 hrs**

Objective: *To develop students' conceptual, analytical, and computational competence in applying statistical methods to collect, organize, analyse, interpret, and present quantitative information for business and economic decision-making.*

Course Objectives

The course aims to:

1. *Develop an understanding of fundamental statistical concepts, methods of data collection, and the sources and implications of errors in statistical investigations.*
2. *Develop the ability to classify, organize, tabulate, and visually present statistical data using appropriate diagrams, graphs, and frequency distributions.*
3. *Develop computational and interpretive skills in applying appropriate measures of central tendency to individual, discrete, and continuous series.*
4. *Develop the ability to measure and analyse variability and distributional characteristics using appropriate measures of dispersion, skewness, and kurtosis.*
5. *Develop the ability to construct, evaluate, and apply index numbers for analysing changes in prices, quantities, and values in business and economic contexts.*

Course Outcomes:

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

1. Explain the fundamental concepts of statistics, identify appropriate methods of data collection, and distinguish between primary and secondary data while recognizing potential sources of statistical errors.

2. Classify, tabulate, and present statistical data using appropriate frequency distributions, bar diagrams, histograms, frequency polygons, frequency curves, and other graphical techniques.

3. Calculate, compare, and interpret Mean, Median, Mode, Geometric Mean, and Harmonic Mean for individual, discrete, and continuous series and select appropriate measures for different data situations.

4. Calculate and interpret Range, Quartile Deviation, Mean Deviation, Standard Deviation, and Coefficient of Variation, and analyse the skewness and kurtosis of statistical distributions.

5. Construct and interpret index numbers using Laspeyres', Paasche's, Fisher's Ideal, and Marshall–Edgeworth methods, and apply tests of adequacy, base shifting, splicing, and deflating techniques in business and economic analysis.

UNIT I: INTRODUCTION, DATA ORGANIZATION AND PRESENTATION:

Meaning and scope of statistics. Importance and limitations of statistics in business and commerce; Statistical investigation: Planning of a statistical enquiry. Sources of data – primary and secondary data. Methods of collecting data. Census and sampling methods. Errors in statistical investigation and approximation; Organization of data: Classification and tabulation of data. Frequency distribution and grouped frequency tables; Diagrammatic and graphical presentation of data: Bar diagrams, component bar diagrams, pie diagrams and line graphs. Histograms, frequency polygon and frequency curve. Interpretation of statistical diagrams and graphs.

UNIT II: MEASURES OF CENTRAL TENDENCY:

Definition and types of data: Individual series, discrete series and continuous series; Meaning and importance of measures of central tendency; Arithmetic Mean – computation for individual, discrete and continuous series. Combined mean, Weighted Mean; Geometric Mean and Harmonic Mean – meaning, computation and applications.

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Partition values – Median , Quartiles, Deciles and Percentiles, and Mode – calculation for different series and graphical location; Comparison of averages – advantages and limitations of different measures of central tendency.

UNIT III: MEASURES OF DISPERSION:

Meaning and significance of dispersion. Characteristics of a good measure of dispersion. Absolute and relative measures of dispersion. Measurement of dispersion through Range, Quartile Deviation, Mean Deviation and Standard Deviation – computation and applications for individual, discrete and continuous series; Relative measures of dispersion – Coefficient of Range, Coefficient of Quartile Deviation and Coefficient of Mean Deviation. Combined Standard Deviation – computation and applications; Applications of dispersion in business and economic analysis. Advantages and limitations of various measures of dispersion.

UNIT IV: RELATIVE DISPERSION AND SHAPE OF DISTRIBUTION:

Coefficient of Variation: Meaning and significance, Relative measure of dispersion, Computation and interpretation, Comparison of consistency and stability of two or more series; Lorenz Curve: Meaning and significance, Construction of Lorenz Curve, Measurement of inequality and concentration, Applications in income, wealth and market-share analysis; Skewness: Meaning and significance, Symmetrical and asymmetrical distributions, Positive and negative skewness, Karl Pearson's Coefficient of Skewness, Bowley's Coefficient of Skewness, Interpretation and applications; Kurtosis: Meaning and significance, Types of kurtosis, Interpretation of kurtosis in statistical analysis.

UNIT V: INDEX NUMBERS:

Meaning and importance of index numbers in economic and business analysis. Uses and limitations of index numbers; Problems in the construction of index numbers; Methods of constructing index numbers: Simple index numbers and weighted index numbers – Fisher, Laspeyres', Paasche's and Marshall–Edgeworth methods; Tests of adequacy of index numbers – Unit test, Time Reversal test and Factor Reversal test, Base shifting, splicing and deflating of index numbers.

SUGGESTED READINGS:

1. **Alagar, K. (2019).** *Business Statistics*. New Delhi: McGraw Hill Education (India) Pvt. Ltd.
2. **Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., Cochran, J. J., Fry, M. J., Ohlmann, J. W., & others. (2020).** *Statistics for Business & Economics*. 14th Edition. Boston: Cengage Learning.
3. **Athma, Prashantha, & Rajyalakshmi, N. (2025).** *Business Statistics – I*. SIA Publishers & Distributors Pvt. Ltd., New Delhi.
4. **Chakravarty, S. K. (2011).** *Business Statistics*. 1st Edition. New Delhi: New Age International Publishers.
5. **Gupta, S. C. (2023).** *Fundamentals of Statistics*. 8th Revised Edition. Mumbai: Himalaya Publishing House.
6. **Gupta, S. P. (2025).** *Fundamentals of Statistics*. New Delhi: Sultan Chand & Sons.
7. **Jain, S. L., & Bhardwaj, S. L. (2025).** *Business Statistics*. Kalyani Publishers, New Delhi.
8. **Kapur, V. K. (2000).** *Statistics: Problems and Solutions*. 7th Revised Edition. New Delhi: Sultan Chand & Sons. The publisher catalogue records the 7th revised edition and 2000 publication year.
9. **Nadar, E. Narayanan. (2025).** *Statistics*. New Delhi: PHI Learning Pvt. Ltd.

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10. **Obul Reddy, Dr., & Shridevi, Dr. D. (2025).** *Business Statistics – I.* Hyderabad: PBP Publications.
11. **Padmaja, Dr., & Kamakshi, K. (2025).** *Business Statistics – I.* 1st Edition. Hyderabad: S.V. Publications.
12. **Sharma, J. K. (2025).** *Business Statistics*. New Delhi: Vikas Publishing House.
13. **Sultana, Nazia, Dr. (2025).** *Business Statistics – I.* Hyderabad: S. Publishers.
14. **Thukral, J. K. (2012).** *Taxmann's Business Statistics*. New Delhi: Taxmann Publications Pvt. Ltd. The bibliographic record identifies the title as published in December 2012.
15. **Patrick, A., & Karusna Sree, Dr. (2025).** *Business Statistics – I.* Mumbai: Himalaya Publishing House.
16. **Sancheti, D. C., & Kapoor, V. K. (1992).** *Statistics: Theory, Methods and Applications*. New Delhi: Sultan Chand & Sons. A library catalogue records the work under these authors and publisher, with 1992 as the publication year.

MJR 302: BUSINESS STATISTICS – I

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	2	2	2	3	2	1	2
CO2	3	3	3	3	2	1	3	2	1	2
CO3	3	3	3	2	2	1	3	2	1	2
CO4	3	3	3	2	2	1	3	2	1	2
CO5	3	3	3	3	2	2	3	3	1	3

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SEMESTER - III

Paper MJR 303: RELATIONAL DATABASE MANAGEMENT SYSTEM

PAPER CODE: MJR 303: **Total Marks:50T+35P+15I=100**

THPW: 5 (3T+4P) ; Credits: 5 **ESED: 2 HRS**

Objective: The course aims to develop conceptual and practical knowledge of database management systems and enable learners to design relational databases, develop database schemas, formulate SQL queries and apply techniques for database security, transaction management, recovery and distributed database systems.

Course Objectives:

The course aims to:

1. ***Develop an understanding of the fundamental concepts, architecture and components of Database Management Systems (DBMS)*** *and their advantages over traditional file-based systems, including the role and functions of a Database Administrator (DBA).*
2. ***Develop the ability to design databases using Entity–Relationship (ER) and relational models****, including entities, relationships, keys, constraints and conversion of ER models into relational schemas.*
3. ***Develop the ability to apply database normalization techniques*** *up to Third Normal Form (3NF) and Boyce–Codd Normal Form (BCNF), and develop an understanding of file organisation and indexing techniques.*
4. ***Develop practical proficiency in SQL*** *for creating, manipulating and controlling databases using DDL, DML, DCL and TCL commands, joins, views, subqueries and other database operations.*
5. ***Develop an understanding of transaction management, concurrency control, database recovery, security and distributed database systems****, including client-server architecture, fragmentation and replication***.**

Course Outcomes:

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

1. Explain the architecture, components and functions of DBMS, differentiate database systems from file-based systems, and describe the role of the Database Administrator and data dictionary.
2. Design Entity–Relationship models and convert them into relational schemas using appropriate primary keys, foreign keys and integrity constraints.
3. Apply normalization techniques up to 3NF and BCNF to reduce data redundancy and improve database integrity, and select appropriate file organisation and indexing techniques.
4. Develop and execute SQL statements using DDL, DML, DCL and TCL commands and implement joins, aggregate functions, nested queries, views, sequences and indexes for database management.
5. Analyse and apply transaction management, concurrency control and database recovery techniques and explain the concepts of database security, distributed databases, fragmentation, replication and client-server architecture.

UNIT-I: BASIC CONCEPTS:

Database Management System - File based system - Advantages of DBMS over file based system - Database Approach - Logical DBMS Architecture - Three level architecture of DBMS or logical DBMS architecture - Need for three level architecture - Physical DBMS Architecture - Database Administrator (DBA) Functions & Role - Data files indices and Data Dictionary

- Types of Database. Relational and ER Models**:** Data Models - Relational Model – Domains - Tuple and Relation - Super keys - Candidate keys - Primary keys and foreign key for the Relations - Relational Constraints - Domain Constraint - Key Constraint - Integrity Constraint - Update Operations and Dealing with Constraint Violations - Relational Operations - Entity Relationship (ER) Model – Entities – Attributes

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– Relationships - More about Entities and Relationships - Defining Relationship for College Database - E-R Diagram - Conversion of E-R Diagram to Relational Database.

UNIT-II: DATABASE INTEGRITY AND NORMALISATION:

Relational Database Integrity - The Keys - Referential Integrity - Entity Integrity - Redundancy and Associated Problems – Single Valued Dependencies – Normalisation - Rules of Data Normalisation - The First Normal Form -The Second Normal Form - The Third Normal Form - Boyce Codd Normal Form - Attribute Preservation - Lossless-join Decomposition - Dependency Preservation. File Organisation : Physical Database Design Issues - Storage of Database on Hard Disks - File Organisation and Its Types - Heap files (Unordered files) - Sequential File Organisation - Indexed (Indexed Sequential) File Organisation - Hashed File Organisation

- Types of Indexes - Index and Tree Structure - Multi-key File Organisation - Need for Multiple Access Paths - Multi-list File Organisation - Inverted File Organisation.

UNIT-III: STRUCTURES QUERY LANGUAGE (SQL):

Meaning – SQL commands - Data Definition Language - Data Manipulation Language - Data Control Language - Transaction Control Language - Queries using Order by – Where - Group by - Nested Queries. Joins – Views – Sequences - Indexes and Synonyms - Table Handling.

UNIT-IV: TRANSACTIONS AND CONCURRENCY MANAGEMENT:

Transactions - Concurrent Transactions - Locking Protocol - Serialisable Schedules - Locks Two Phase Locking (2PL) - Deadlock and its Prevention - Optimistic Concurrency Control. Database Recovery and Security: Database Recovery meaning - Kinds of failures - Failure controlling methods - Database errors - Backup & Recovery Techniques - Security & Integrity - Database Security - Authorization.

UNIT-V: DISTRIBUTED AND CLIENT SERVER DATABASES:

Need for Distributed Database Systems - Structure of Distributed Database - Advantages and Disadvantages of DDBMS - Advantages of Data Distribution - Disadvantages of Data Distribution - Data Replication - Data Fragmentation. Client Server Databases: Emergence of Client Server Architecture - Need for Client Server Computing - Structure of Client Server Systems & its advantages.

ADVANCED TOPICS: Overview: Parallel Database - Multimedia Database - Mobile Database - Web Database - Multidimensional Database. Data Warehouse - OLTP Vs OLAP - NoSQL Database.

LAB: SQL QUERIES BASED ON VARIOUS COMMANDS.

SUGGESTED READINGS

1. **Elmasri, R. & Navathe, S. B. (2025).** *Database Systems: Models, Languages, Design and Application Programming*. New Delhi: Pearson Education.
2. **ISRD Group (2025).** *Introduction to Database Management Systems*. New Delhi: McGraw Hill.
3. **Kumar, K. Prashanth (2017).** *Relational Database Management System*. Reprinted 2024. New Delhi: Kalyani Publishers.
4. **Gutti, Sunanda (2025).** *Relational Database Management System*. Hyderabad: S. Publishers.
5. **Ramakrishnan, R. & Gehrke, J. (2025).** *Database Management Systems*. New Delhi: McGraw Hill.
6. **Hoffer, J. A., Ramesh, V. & Topi, H. (2025).** *Modern Database Management*. Noida: Pearson Education.
7. **Silberschatz, A., Korth, H. F. & Sudarshan, S. (2025).** *Database System Concepts*. New Delhi: McGraw Hill.
8. **Bhaia, Parteek (2025).** *Simplified Approach to Database Management Systems*. New Delhi: Kalyani Publishers.
9. **Pathak, Nirupma (2025).** *Database Management System*. Mumbai: Himalaya Publishing House Pvt. Ltd.
10. **Pannerselvam, R. (2025).** *Database Management Systems*. New Delhi: PHI Learning Pvt. Ltd.
11. **Srivastava, S. & Srivastava, A. (2025).** *Relational Database Management System*. New Delhi: New Age International Publishers.

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12. **IIT Bombay (2025).** *PHP and MySQL Spoken Tutorials*. Mumbai: Indian Institute of Technology Bombay.
13. **Abramson, I. (2025).** *Oracle Database: A Beginner's Guide*. New York: McGraw Hill.
14. **Reddy, G. Kavitha & Nageshwar, P. (2025).** *Relational Database Management System*. 2nd Edition. Hyderabad: S. V. Publications.
15. **Kandula, Tulasi Ram & Preethi, M. (2025).** *Relational Database Management Systems*. Mumbai: Himalaya Publishing House Pvt. Ltd.

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16. **Oracle Corporation (2025).** *Oracle Database Documentation*. Austin, Texas: Oracle Corporation.
17. **MySQL (2025).** *MySQL Reference Manual*. Oracle Corporation.

MJR 303: RELATIONAL DATABASE MANAGEMENT SYSTEM

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	1	**3**	2	1	2	1	3
CO2	3	3	**3**	1	**3**	2	2	2	1	3
CO3	3	3	**3**	1	**3**	1	2	2	1	3
CO4	3	3	**3**	2	**3**	2	2	**3**	2	**3**
CO5	3	3	**3**	2	**3**	**3**	2	**3**	2	**3**

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SEMESTER - IV

Paper MJR 401: INCOME TAX

PAPER CODE: MJR 401 **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

Objective: To develop students' conceptual, computational, and analytical competence in applying the provisions of the Income-tax Act, 2025 and relevant transitional provisions of the Income-tax Act, 1961 to the determination of taxable income and tax liability of individual taxpayers.

Course Objectives:

The course aims to:

1. *Develop an understanding of the fundamental concepts, principles, scope, and legal framework of income taxation, including the transition from the Income-tax Act, 1961 to the Income-tax Act, 2025 and the concept of the Tax Year.*
2. *Develop the ability to compute taxable income under the heads of Salary and Income from House Property, including the treatment of allowances, perquisites, annual value, and applicable deductions.*
3. *Develop competence in determining taxable income from Profits and Gains of Business or Profession, including allowable and disallowable expenses, depreciation, and presumptive taxation.*
4. *Develop the ability to compute and analyse income under Capital Gains and Income from Other Sources, including applicable exemptions, deductions, and special provisions.*
5. *Develop the ability to determine the taxable income and tax liability of individuals by applying clubbing provisions, set-off and carry-forward of losses, deductions, applicable tax regimes, and other relevant provisions.*

Course Outcomes:

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

1. Explain the fundamental principles and framework of income taxation, determine residential status and scope of total income, and distinguish between the provisions applicable under the Income-tax Act, 1961 and the Income-tax Act, 2025, including the transition to the Tax Year system.

2. Compute taxable income under the heads of Salary and Income from House Property by appropriately applying provisions relating to allowances, perquisites, annual value, exemptions, and permissible deductions.

3. Compute taxable income from Profits and Gains of Business or Profession by identifying allowable and disallowable expenses, calculating depreciation, and applying relevant provisions relating to presumptive taxation and deemed profits.

4. Compute and interpret taxable Capital Gains and Income from Other Sources by applying the relevant provisions relating to transfer, exemptions, deductions, and classification of income.

5. Determine the Gross Total Income and Total Income of individual assessees by applying clubbing provisions, set-off and carry-forward of losses, eligible deductions, and applicable tax-regime provisions, and calculate the resulting tax liability.

UNIT–I: INTRODUCTION:

Brief History of Income Tax Acts in India with a special reference to Income Tax Act 1961 and Income Tax Act 2025 - Canons of Taxation - Direct and Indirect Taxes – Definitions and Basic Concepts: Assessee – Deemed Assessee – Assessee-in default – Person – Income – Agricultural Income - Rules for Integration of Agricultural and Non Agricultural Incomes - Heads of Income - Gross Total Income – Total Income - Assessment Year - Previous Year Concept of Tax Year as per Income Tax Act 2025 - Incomes Exempt from Tax - Charge of Income Tax -Residential Status - Scope of Total Income - Old Tax Regime and New Tax Regime (Theory Only)

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UNIT–II: INCOME FROM SALARIES AND INCOME FROM HOUSE PROPERTY

Definition of Salary – Characteristics of Salary – Allowances - Perquisites - Profits in lieu of Salary – Provident Funds – Deductions – Problems on Computation of Income from Salary.

Definition of House Property – Annual Value – Determination of Annual Value for Let-out House and Self-occupied House – Arrears of Rent and Unrealised Rent Received -Property Owned by Co-owners - Deductions – Problems on Computation of Income from House Property.

UNIT– III: PROFITS AND GAINS OF BUSINESS OR PROFESSION

Definition of Business and Profession – Procedure for Computation of Income from Business – Rules – Revenue and Capital Nature of Incomes and Expenses – Allowable Expenses – Expenses Expressly Disallowed – Deemed Profits – Valuation of Stock – Presumptive Taxation - Proforma of Computation of Professional Income- Chartered Accountant -Advocate - Medical Practitioner - Problems on computation of Income from Business and Profession.

Depreciation: Meaning – Conditions for charge of depreciation – Assets used for Business – Block of Assets – Rates of Depreciation (Theory only)

UNIT– IV: CAPITAL GAINS AND INCOME FROM OTHER SOURCES:

Introduction - Meaning – Basis of charge – Short term and Long term Capital Assets – Transfer of Capital Asset – Deemed Transfer – Transactions not Regarded as Transfer – Determination of Cost of Acquisition – Procedure for Computation of Long-term and Short-term Capital Gains/Losses – Exemptions in Respect of Certain Capital Gains – Problems on Computation of Capital Gains.

Incomes from Other Sources – Interest on Securities – Deductions - Amounts not Deductible - Problems on Computation on Income from Other Sources.

UNIT-V: COMPUTATION OF TOTAL INCOME OF INDIVIDUALS :

Income of Other Persons Included in the Total Income of Assessee – Aggregation of Income – Provisions of Set-off and Carry Forward of Losses – Computation of Gross Total Income – Deductions to be made from Gross Total Income – Alternate Minimum Tax - Problems on Computation of Total Income and Tax Liability as per both Old and New Regimes.

SUGGESTED READINGS:

1. **Ahuja, Girish (2025).** *Direct Tax Law and Practice*. New Delhi: Bharat Law House.
2. **Balachandran, V. & Thothadri, S. (2024).** *Taxation Law and Practice*. New Delhi: PHI Learning Pvt. Ltd.
3. **Gaur, V. P. (2017).** *Income Tax*. 10th Revised Edition. New Delhi: Kalyani Publishers.
4. **Gaur, V. P. & Narang, D. B. (2025).** *Income Tax Law and Practice*. New Delhi: Kalyani Publishers.
5. **Johar, R. K. (2024).** *Income Tax*. New Delhi: McGraw Hill Education.
6. **Lal, B. B. (2023).** *Income Tax*. New Delhi: Pearson Education.
7. **Patil Biradar, Maruthi Rao & Chakravarthy, K. Phani (2025).** *Income Tax*. 1st Edition. Hyderabad: S. V. Publications.
8. **Rao, P. V. Ramana & Sudhakar, A. (2025).** *Income Tax*. Hyderabad: National Publishing Company.
9. **Ravi, M. N. (2025).** *Taxation*. Hyderabad: Professional Books Publishers.
10. **Saha, R. G. (2025).** *Taxation*. Mumbai: Himalaya Publishing House Pvt. Ltd.
11. **Saxena, R. G. & Reddy, Geetha (2025).** *Income Tax*. Mumbai: Himalaya Publishing House Pvt. Ltd.

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13. **Government of India (2025).** *Income-tax Act, 1961, as amended from time to time*. New Delhi: Government of India.
14. **Income Tax Department, Government of India (2025).** *Income Tax Rules, Circulars, Notifications and Guidance*. New Delhi: Government of India.
15. **Central Board of Direct Taxes (2025).** *Circulars, Notifications and Taxpayer Guidance*. New Delhi: Ministry of Finance, Government of India.

MJR 401: INCOME TAX

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	2	2	3	3	2	1	3
CO2	3	3	3	2	2	3	3	2	1	3
CO3	3	3	3	2	2	3	3	3	1	3
CO4	3	3	3	2	2	3	3	3	1	3
CO5	3	3	3	3	3	3	3	3	1	3

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SEMESTER - IV

Paper MJR 402: BUSINESS STATISTICS - II

PAPER CODE: MJR 402 **Max. Marks: 80U +20I=100**

THPW: 5; Credits: 5 **ESED: 3 hrs**

Objective: To develop students' advanced analytical, computational, and interpretive competence in applying statistical techniques for analysing relationships, making predictions, evaluating uncertainty, and supporting business and economic decision-making.

Course Objectives:

The course aims to:

1. *Develop an understanding of correlation and association between variables and the statistical techniques used to measure and interpret their relationships.*
2. *Develop the ability to apply regression analysis for estimation, prediction, and business forecasting and to evaluate the reliability of regression-based estimates.*
3. *Develop analytical skills in examining time-series data, identifying trends, and measuring seasonal variations using appropriate statistical techniques.*
4. *Develop an understanding of fundamental probability concepts, laws, and conditional probability and their application to decision-making under uncertainty.*
5. *Develop the ability to understand and apply discrete and continuous probability distributions in business, economic, and practical decision-making contexts.*

Course Outcomes:

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

1. *Calculate and interpret Karl Pearson's coefficient of correlation, Spearman's rank correlation coefficient, covariance, and coefficient of determination to assess the strength and direction of relationships between variables.*
2. *Derive and apply regression equations, estimate regression coefficients, interpret regression relationships, and use the standard error of estimate to assess the reliability of predictions and forecasts.*
3. *Analyse time-series data by measuring trends using graphical, semi-average, moving-average, and least-squares methods, and calculate and interpret seasonal variations for business forecasting.*
4. *Apply the addition and multiplication theorems of probability, conditional probability, and Bayes' Theorem to analyse business and economic problems involving uncertainty.*
5. *Construct and apply Binomial, Poisson, and Normal probability distributions and use the Central Limit Theorem to solve and interpret practical statistical problems.*

UNIT I: CORRELATION:

Meaning and types of correlation – positive, negative, simple, multiple, partial, linear and non-linear correlation. Correlation and causation. Methods of studying correlation: Scatter diagram, Concurrent Deviation Method, Karl Pearson's coefficient of correlation and Spearman's rank correlation coefficient. Covariance and its relationship with Correlation. Standard error and probable error of the coefficient of correlation. Coefficient of determination, coefficient of non-determination and coefficient of alienation. Interpretation, applications and limitations of correlation in business and economic analysis.

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UNIT II: REGRESSION ANALYSIS:

Meaning and significance of regression analysis. Difference between correlation and regression. Types of regression – linear and non-linear regression. Lines of regression – regression line of Y on X and regression line of X on Y; Regression equations and regression coefficients – derivation of regression equations, estimation of regression coefficients, properties of regression coefficients, and relationship between correlation coefficient and regression coefficients. Standard Error of Estimate – meaning, computation and interpretation. Prediction and forecasting using regression equations. Applications of regression analysis in business and economic decision-making. Limitations of regression analysis.

UNIT III: TIME SERIES ANALYSIS:

Meaning and importance of time series in business and economic analysis. Components of time series – Trend, Seasonal, Cyclical and Irregular Variations; Measurement of Trend: Graphic Method, Semi-Averages Method (for even and odd number of years/periods), Moving Averages Method (3-year, 4-year, 5-year and 7-year moving averages; centering of moving averages where necessary); Least Squares Method (Linear Trend); Measurement of Seasonal Variations: Simple Averages Method, Ratio-to-Moving Average Method, Link Relative Method, Applications, Uses and Limitations of Time Series Analysis in business and economic studies.

UNIT IV: PROBABILITY THEORY:

Meaning and importance of probability. Random experiments, sample space and events. Types of events – simple and compound events, mutually exclusive events, collectively exhaustive events and independent events. Basic concepts of set theory relevant to probability. Approaches to probability – classical, empirical and subjective approaches; Laws of probability – Addition Theorem and Multiplication Theorem. Conditional probability and Bayes' Theorem. Applications of probability in business and decision-making.

UNIT V: PROBABILITY DISTRIBUTIONS:

Binomial Distribution: Assumptions and characteristics, Properties of Binomial Distribution, Computation of probabilities, Fitting of Binomial Distribution; Poisson Distribution: Assumptions and characteristics, Properties of Poisson Distribution, Computation of probabilities, Fitting of Poisson Distribution; Normal Distribution: Characteristics and properties of Normal Distribution, Standard Normal Distribution, Computation of probabilities using Normal Distribution tables, Applications of Normal Distribution in business and economics, Central Limit Theorem – concept and significance.

SUGGESTED READINGS:

1. **Alagar, K. (2011).** *Business Statistics*. 2nd Edition. New Delhi: McGraw Hill Education (India) Pvt. Ltd.
2. **Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., Cochran, J. J., Fry, M. J., & Ohlmann, J. W. (2020).** *Statistics for Business & Economics*. 14th Edition. Boston: Cengage Learning.
3. **Athma, Prashantha, & Rajyalakshmi, N. (2025).** *Business Statistics – II*. New Delhi: SIA Publishers & Distributors Pvt. Ltd.
4. **Chakravarty, S. K. (2011).** *Business Statistics*. 1st Edition. New Delhi: New Age International Publishers.
5. **Gupta, S. C. (2023).** *Fundamentals of Statistics*. 8th Revised Edition. Mumbai: Himalaya Publishing House.
6. **Gupta, S. P. (2025).** *Fundamentals of Statistics*. New Delhi: Sultan Chand & Sons.
7. **Jani, P. N. (2025).** *Business Statistics: Theory and Application*. New Delhi: PHI Learning Pvt. Ltd.
8. **Kapoor, V. K. (2000).** *Statistics: Problems and Solutions*. 7th Revised Edition. New Delhi: Sultan Chand & Sons.
9. **Laxman, G., Reddy, Vasudeva, & Goud, K. (2025).** *Business Statistics*. Hyderabad: Taxmann Publications Pvt. Ltd.

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10. **Levin, R. I., & Rubin, D. S. (2013).** *Statistics for Management*. 7th Edition. New Delhi: Pearson Education.
11. **Obul Reddy, D., & Shridevi, D. (2025).** *Business Statistics – II*. Hyderabad: PBP Publications.
12. **Patrick, A., & Karuna Sree. (2025).** *Business Statistics – II*. Mumbai: Himalaya Publishing House.
13. **Sancheti, D. C., & Kapoor, V. K. (1992).** *Statistics: Theory, Methods and Applications*. New Delhi: Sultan Chand & Sons.
14. **Sharma, J. K. (2014).** *Business Statistics*. 7th Edition. New Delhi: Vikas Publishing House.
15. **Sultana, Nazia. (2025).** *Business Statistics – II*. Hyderabad: S. Publishers.
16. **Thukral, J. K. (2012).** *Business Statistics*. New Delhi: Taxmann Publications Pvt. Ltd.
17. **Vora, N. D. (2004).** *Quantitative Techniques in Management*. New Delhi: Tata McGraw-Hill Publishing Company Ltd.
18. **Bhagya Laxmi, S., & Sudhakar, Gampala. (2025).** *Business Statistics – II*. 1st Edition. Hyderabad: S.V. Publications.

MJR 402: BUSINESS STATISTICS – II

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	2	2	2	3	2	1	2
CO2	3	3	3	3	2	1	3	2	1	2
CO3	3	3	3	2	2	1	3	2	1	2
CO4	3	3	3	2	2	1	3	2	1	2
CO5	3	3	3	3	2	2	3	3	1	3

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SEMESTER - IV

Paper MJR 403: WEB TECHNOLOGIES

PAPER CODE: MJR 403 **Max. Marks: 50U+35P+15I=100**
THPW: (3T+4P); Credits: 5 **ESED: 2 hrs**

Objective: The course aims to develop conceptual and practical skills in web technologies and enable learners to design, develop and implement structured, interactive and dynamic web pages using HTML, CSS, JavaScript and XML.

Course Objectives:
The course aims to:

1. ***Develop an understanding of the fundamentals of web technologies, HTML structure, elements, tags, attributes and web design principles*** *and apply them in creating web pages.*
2. ***Develop practical skills in CSS and Dynamic HTML (DHTML)*** *for designing, formatting and enhancing interactive and multimedia-enabled web pages.*
3. ***Develop proficiency in JavaScript programming*** *for client-side scripting using variables, data types, operators, functions, arrays, objects and the Document Object Model (DOM).*
4. ***Develop the ability to implement event-driven programming using JavaScript*** *and create interactive and responsive web pages through appropriate events and event handlers.*
5. ***Develop an understanding of XML and its applications*** *and enable learners to create, structure, style and manipulate XML documents using XML stylesheets, DOM and XML query techniques.*

Course Outcomes:
Upon successful completion of the course, the learner will be able to:

1. *Design and develop structured static web pages using HTML elements such as headings, lists, tables, forms, images, hyperlinks and other appropriate web components.*
2. *Apply CSS and DHTML techniques to design, format and enhance the appearance, layout and interactive features of web pages.*
3. *Develop client-side scripts using JavaScript and apply variables, operators, functions, arrays, objects and DOM manipulation to create dynamic web pages.*
4. *Implement JavaScript events and event handlers such as* `onclick`, `onload`, `onmouseover`, `onkeypress` *and* `onsubmit` *to develop interactive and responsive web pages.*
5. *Create, structure, style and manipulate XML documents and apply XML-related technologies such as XML stylesheets, DOM and XML query techniques for structured data representation and retrieval.*

UNIT-I: INTRODUCTION:

Introduction to web technology – HTML – types of HTML tags-basic Structure of HTML – Web design principles – HTML attributes – styles – Hypertext - Formatting text – Forms & formulating instructions & formulation elements – Commenting code – Back grounds – Images-Hyperlinks – Lists –Tables – Frames

UNIT-II: AN OVER VIEW OF DYNAMIC WEB PAGES & DYNAMIC WEB PAGE:

An over view of dynamic web pages – technologies: Introduction to Dynamic HTML programing - Cascading style sheets (CSS) – types and advantages of CSS – CSS basic syntax and structure - Changing Text and Attributes - Dynamically changing style - Text Graphics and placements - Creating multimedia effects with filters and Transactions.

UNIT-III: JAVA SCRIPT&:

Java Script: Introduction - Client side Java script - Server side Java script - Core features - Data types and variables – Operators - Expressions and statements – Functions – Objects – Array - Date and math related objects - Document object model - Event handling.

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UNIT-IV: EVENTS AND EVENT HANDLERS:

Events And Event Handlers: General information about Events – Event – OnAbort – OnClick - Ondbl click - Ondrag drop – Onerror - Onfocus - Onkey Press – Onkey Up – Onload - Onmouse Down – Onmouse Move - Onmouse Out – Onmouse Over - Onmove - Onrest – Onresize - Onselect - Onsubmit - Onunload.

UNIT-V: EXTENSIBLE MARKUP LANGUAGE (XML:

Extensible Markup Language (XML): Introduction - Creating XML Documents - XML style Sheet – Hyperlinks in XML Document Object Model - XML Query Language.

LAB WORK: CREATING A WEBSITE WITH DYNAMIC FUNCTIONALITY USING CLIENT- SIDE AND SERVER SIDE SCRIPTING.

SUGGESTED READINGS:

1. **Sekhar, Indrakanti & Battu, V. N. (2025).** *Web Technology*. Mumbai: Himalaya Publishing House Pvt. Ltd.
2. **Deitel, Paul J. & Deitel, Harvey M. (2025).** *Internet and World Wide Web: How to Program*. Noida: Pearson Education.
3. **Kumar, Puneet (2021).** *Web Technologies*. Reprinted 2026. New Delhi: Kalyani Publishers.
4. **Reddy, Kavitha (2025).** *Web Technology*. Hyderabad: S. Publishers.
5. **Bates, Chris (2025).** *Web Programming*. New Delhi: Wiley.
6. **NIIT (2025).** *HTML and XML: An Introduction*. New Delhi: PHI Learning Pvt. Ltd.
7. **Castro, Elizabeth (2025).** *HTML for the World Wide Web with XHTML and CSS*. Noida: Pearson Education.
8. **Kamal, Raj (2025).** *Internet and Web Technologies*. New Delhi: McGraw Hill.
9. **Gopalan, N. P. & Sivaselvan, B. (2025).** *Web Technology: A Developer's Perspective*. New Delhi: PHI Learning Pvt. Ltd.
10. **Singh, R. & Sonia, M. (2025).** *Internet Technology and Web Page Design*. New Delhi: Kalyani Publishers.
11. **Xavier, C. (2025).** *Web Technology and Design*. New Delhi: New Age International Publishers.
12. **Babu, Bandari Vinod & Goud, S. Sudharshan (2025).** *Web Technologies*. 2nd Edition. Hyderabad: S. V. Publications.
13. **Kumar, K. Prasanth & Sudha, M. (2025).** *Web Technologies*. Mumbai: Himalaya Publishing House Pvt. Ltd.

REFERENCE RESOURCES

14. **World Wide Web Consortium (W3C) (2025).** *HTML, CSS, DOM and Web Standards Documentation*. World Wide Web Consortium.
15. **Mozilla Developer Network (MDN) (2025).** *Web Development Documentation: HTML, CSS, JavaScript and DOM*. Mozilla.

MJR 403: WEB TECHNOLOGIES

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	2	**3**	1	1	3	1	3
CO2	3	3	**3**	2	**3**	1	1	**3**	1	3
CO3	3	3	**3**	2	**3**	1	2	**3**	1	**3**
CO4	3	3	**3**	**3**	**3**	2	1	**3**	2	**3**
CO5	3	3	**3**	2	**3**	2	1	3	2	**3**

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SEMESTER V

Paper MJR 501 (a) : COST ACCOUNTING

PAPER CODE: MJR 501 (a) **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

Objective: *To make the students acquire the knowledge of cost accounting methods.*

Course Objectives:
The course aims to enable students to:

1. *Understand the concepts and principles of cost accounting.*
2. *Develop knowledge of material, labour and overhead cost control.*
3. *Apply costing techniques for cost ascertainment and control.*
4. *Prepare cost statements using unit, job, contract and process costing methods.*
5. *Analyse cost information to support managerial decision-making.*

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

1. *Explain the concepts and methods of cost accounting.*
2. *Apply material, labour and overhead costing techniques.*
3. *Prepare cost sheets and job cost statements.*
4. *Prepare contract and process cost accounts.*

Use cost information for planning, control and managerial decision-making

UNIT-I: INTRODUCTION:
Cost Accounting: Definition – Features – Objectives – Functions – Scope – Advantages and Limitations - Essentials of a good cost accounting system- Difference between Cost Accounting and Financial Accounting – Cost concepts – Cost Classification. (theory only)

UNIT-II: MATERIAL:
Direct and Indirect Material cost – Inventory Control Techniques – Stock Levels – EOQ – ABC Analysis – JIT - VED - FSND - Issue of Materials to Production – Pricing methods: FIFO - LIFO with Base Stock and Simple and Weighted Average methods. (Including Problems)

UNIT-III: LABOUR AND OVERHEADS:
Labour: Direct and Indirect Labour Cost – Methods of Payment of Wages (only Incentive Plans): Halsey, Rowan, Taylor Piece Rate and Merrick Multiple Piece Rate Methods.
Overheads: Classification - Methods of Allocation - Apportionment and Absorption of overheads. (Including Problems)

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UNIT-IV: UNIT AND JOB COSTING:

Unit Costing: Features - Cost Sheet – Tender and Estimated Cost Sheet.

Job Costing: Features - Objectives – Procedure - Preparation of Job Cost Sheet. (Including Problems)

UNIT-V: CONTRACT AND PROCESS COSTING:

Contract Costing: Features – Advantages - Procedure of Contract Costing – Guidelines to Assess profit on incomplete Contracts.

Process Costing: Meaning – Features – Preparation of Process Account – Normal and Abnormal Losses. (Including Problems)

SUGGESTED READINGS:

1. **Jain, S.P. and Narang, K.L., 2009,** *Cost Accounting*, 8th Edition, Kalyani Publishers, New Delhi.
2. **Rao, Srihari Krishna,** *Cost Accounting*, Himalaya Publishing House, Mumbai, **Latest Edition**.
3. **Athma, Prashanta, 2011,** *Cost and Management Accounting*, 1st Edition, Himalaya Publishing House, Mumbai.
4. **Yogeshweran, G.,** *Cost Accounting*, PBP Publications, **Latest Edition**.
5. **Jawahar Lal,** *Cost Accounting*, McGraw Hill Education, New Delhi, **Latest Edition**.
6. **Banerjee, Bhabatosh,** *Cost Accounting: Theory and Practice*, PHI Learning Private Limited, New Delhi, **Latest Edition**.
7. **Tulsian, P.C.,** *Introduction to Cost Accounting*, S. Chand Publishing, New Delhi, **Latest Edition**.
8. **Horngren, Charles T., Datar, Srikant M. and Rajan, Madhav V.,** *Cost Accounting: A Managerial Emphasis*, Pearson Education, **Latest Edition**.
9. **Kishore, Ravi M.,** *Cost Accounting*, Taxmann Publications, New Delhi, **Latest Edition**.

MJR 501(a): COST ACCOUNTING

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	1	2	2	2	1	2
CO2	3	3	3	2	2	2	3	2	1	2
CO3	3	3	3	2	2	2	3	2	1	2
CO4	3	3	3	2	2	2	3	3	1	2
CO5	3	3	3	3	2	3	3	3	1	3

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SEMESTER V

MJR 501(b): BUSINESS ECONOMICS

PAPER CODE: MJR501 (b) **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

Objective: The course aims to develop an understanding of economic principles, concepts and analytical tools and enable learners to apply them to business and managerial decision-making in a dynamic economic environment.

Course Objectives:
The course aims to:

1. ***Develop foundational knowledge*** *of business economics, its nature, scope and relevance to business and managerial decision-making.*
2. ***Develop the ability to analyse demand,*** *determinants of demand and different forms of elasticity and apply them to business and pricing decisions.*
3. ***Explain and analyse*** *the laws of supply, consumer surplus and theories of consumer behaviour, including utility and indifference curve approaches.*
4. ***Develop an understanding of production and cost concepts,*** *production functions, laws of returns and economies of scale, and apply them to production and resource-allocation decisions.*
5. ***Develop the ability to analyse revenue and break-even concepts*** *and apply them to managerial planning, pricing and business decision-making.*

Course Outcomes:
Upon successful completion of the course, the learner will be able to:

1. *Explain the nature, scope and significance of business economics and distinguish between microeconomic and macroeconomic perspectives relevant to business decision-making.*
2. *Analyse demand functions, determinants of demand and different forms of elasticity and apply elasticity concepts to pricing, sales and business decisions.*
3. *Analyse supply behaviour and explain consumer behaviour using utility analysis, consumer surplus and indifference curve approaches.*
4. *Evaluate production functions, laws of returns and economies of scale and analyse cost behaviour for efficient production and resource-allocation decisions.*
5. *Analyse cost and revenue behaviour and apply break-even analysis to business planning, pricing and managerial decision-making.*

UNIT-I: INTRODUCTION:

Business Economics: Meaning - Nature – Characteristics - Importance and Role - Micro & Macro Economics - Scope - Objectives - Law of Diminishing marginal utility - Law of Equi-marginal utility.

UNIT- II: DEMAND ANALYSIS:

Meaning – Function - Factors influencing Demand -Types of Demand -Demand Curve - Law of Demand –Exceptions to the law of demand-Elasticity of Demand: Concept - Types of elasticity of demand-price, income and cross Elasticity of Demand –measurement of elasticity—arc and point methods—Importance of various Elasticity of Demand

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UNIT-III: SUPPLY ANALYSIS:

Law of Supply - Factors influencing Supply - Market Equilibrium- Consumer Surplus - Theory of Consumer behavior - Utility and indifference curve analysis.

UNIT–IV: PRODUCTION ANALYSIS:

Concept of Production –production function-Total Production - Marginal Production - Average Production –returns to a factor- Law of Variable Proportions - Law of Returns to Scale – Isocost – Isoquants - Economies and Dis-economies of Scale.

UNIT-V: COST AND REVENUE ANALYSIS:

Theory of Cost - Concepts of Cost - Short run and Long run cost curves - Traditional and Modern Approaches -Revenue Curves–relationship between total marginal and average revenues- --Break Even Analysis—Meaning – Assumptions – Uses and Limitations.

SUGGESTED READINGS:

1. **Mankar, V. G. (2025).** *Business Economics*. Mumbai: Himalaya Publishing House Pvt. Ltd.
2. **Agrawal, Vanith (2025).** *Managerial Economics*. Noida: Pearson Education.
3. **Ahuja, H. L. (2025).** *Business Economics*. New Delhi: S. Chand & Company Ltd.
4. **Lekhi, K. K. (2025).** *Business Economics*. New Delhi: Kalyani Publishers.
5. **Mithani, D. M. (2025).** *Business Economics*. Mumbai: Himalaya Publishing House Pvt. Ltd.
6. **Bandaru, Ramakrishna (2025).** *Business Economics*. New Delhi: Tata Publications.
7. **Chopra, P. N. (2025).** *Business Economics*. New Delhi: Kalyani Publishers.
8. **Dwivedi, D. N. (2025).** *Essentials of Business Economics*. New Delhi: Vikas Publishing House.
9. **Varshney, R. L. & Maheshwari, K. L. (2025).** *Managerial Economics*. New Delhi: Sultan Chand & Sons.
10. **Mehta, P. K. (2025).** *Business Economics*. New Delhi: Taxmann Publications Pvt. Ltd.
11. **Chopra, P. N. & Ghosh, Seema (2025).** *Business Economics*. New Delhi: Kalyani Publishers.
12. **Mehra, Jyothi & Chaturvedi, Vinaya (2025).** *Business Economics*. Hyderabad: Professional Books Publishers.
13. **Shareef, Shabiha (2025).** *Business Economics*. Hyderabad: Vedashree Publishers.
14. **Misra, S. K. & Puri, V. K. (2025).** *Economic Environment of Business*. Mumbai: Himalaya Publishing House Pvt. Ltd.
15. **Pandey, K. M. (2025).** *Economics for Managerial Decisions*. Mumbai: Himalaya Publishing House Pvt. Ltd.

REFERENCE RESOURCES:

16. **Reserve Bank of India (2025).** *Annual Report*. Mumbai: Reserve Bank of India.
17. **Government of India (2025).** *Economic Survey*. New Delhi: Ministry of Finance.
18. **Government of India (2025).** *Union Budget and Economic Policy Documents*. New Delhi: Ministry of Finance.

MJR 501(b): BUSINESS ECONOMICS

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	1	1	1	3	2	1	3
CO2	3	3	3	1	2	1	**3**	2	1	3
CO3	3	3	**3**	1	1	1	**3**	2	1	3
CO4	3	3	**3**	1	2	1	**3**	2	1	3
CO5	3	3	**3**	2	2	1	**3**	**3**	1	3

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SEMESTER V

MJR 501 (c) : MANAGEMENT INFORMATION SYSTEMS

PAPER CODE: MJR 501 (c) **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

Objective: *To equip the students with finer nuances of MIS.*

Course Objectives

The course aims to enable students to:

1. *Understand the concepts and applications of Management Information Systems (MIS).*
2. *Develop knowledge of information systems for managerial decision-making.*
3. *Understand the development and implementation of MIS and ERP systems.*
4. *Analyse advanced MIS tools, business intelligence and system security.*
5. *Appreciate the role of MIS in business collaboration and organisational performance.*

Course Outcomes

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

1. *Explain the concepts and functions of Management Information Systems.*
2. *Apply information systems to support managerial decision-making.*
3. *Evaluate the development and implementation of MIS and ERP systems.*
4. *Analyse the role of business intelligence, decision support systems and information security.*
5. *Assess the impact of MIS on business processes, collaboration and organisational effectiveness.*

UNIT–I: INTRODUCTION TO MIS:

The Technical and Business Perspective, Organization Structure, Evaluation of MIS through Information System, The Decision Making Process , System Approach to Problem Solving, The Structure of Management Information System, MIS Organization within the Company.

UNIT-II: INFORMATION SYSTEMS FOR DECISION MAKING:

Evolution of an Information System, Basic Information Systems, Decision Making and MIS, Decision Assisting Information System, Concepts of Balanced MIS Effectiveness and Efficiency Criteria.

UNIT-III: DEVELOPMENT OF MIS:

Methodology and Tools/Techniques for Systematic Identification, Evaluation and Modification of MIS. *Enterprise Resource Planning:* Introduction, Basics of ERP, Evolution of ERP, Enterprise Systems in Large Organizations, Benefits and Challenges of Enterprise Systems, *E-Enterprise System :* Introduction: Managing the E-enterprise, Organisation of Business in an E-enterprise, E-business, E-commerce, E-communication, E-collaboration.

UNIT-IV: ADVANCED MIS:

Concepts, Needs and Problems in Achieving Advanced MIS, DSS., Business intelligence + process management, systems development, and security.

UNIT-V: COLLABORATION, IMPACT & PITFALLS IN MIS:

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Collaboration processes and information systems, Impact of Web 2.0 and social media on business process, Pitfalls in MIS Development: Fundamental Weakness, Soft Spots in Planning and Design Problems.

SUGGESTED READINGS:

1. **Murdick, Robert G., Ross, Joel E. and Claggett, James R., 1984,** *Information Systems for Modern Management*, 3rd Edition, Prentice-Hall, Englewood Cliffs, New Jersey.
2. **Kroenke, David M.,** *Processes, Systems, and Information*, **Latest Edition**.
3. **Miller, M. Lisa, 2009,** *MIS Cases: Decision Making with Application Software*, 4th Edition, Pearson Prentice Hall, Upper Saddle River, New Jersey.
4. **Laudon, Kenneth C. and Laudon, Jane P., 2021,** *Management Information Systems: Managing the Digital Firm*, 17th Edition, Pearson Education.

MJR 501(c): MANAGEMENT INFORMATION SYSTEMS

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	1	**3**	1	2	2	1	3
CO2	3	3	**3**	2	**3**	1	**3**	3	1	3
CO3	3	3	**3**	1	**3**	2	2	**3**	2	**3**
CO4	3	3	**3**	2	**3**	**3**	**3**	3	2	**3**
CO5	3	3	**3**	2	**3**	2	**3**	**3**	**3**	**3**

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SEMESTER V

MJR 502 (a) : BUSINESS ETHICS & CORPORATE GOVERNANCE

PAPER CODE: MJR 502 (a) **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

Course Objectives:
The course aims to enable students to:

1. *Understand the philosophical foundations and evolution of business ethics.*
2. *Analyze ethical issues arising in contemporary business environments.*
3. *Examine corporate governance principles, structures, and regulatory frameworks.*
4. *Understand the role of boards, directors, auditors, regulators, and stakeholders in promoting good governance.*
5. *Evaluate corporate sustainability, ESG reporting, CSR, and ethical leadership.*
6. *Develop ethical reasoning and responsible decision-making skills applicable to business and society.*

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

1. *Explain the concepts, theories, and principles of business ethics and their relevance to modern organizations.*
2. *Evaluate ethical dilemmas in business using established ethical frameworks and stakeholder perspectives.*
3. *Analyze corporate governance mechanisms, regulatory requirements, and the roles of various governance institutions.*
4. *Assess corporate sustainability initiatives, CSR policies, ESG reporting, and responsible business practices.*
5. *Recommend ethical and governance strategies for organizations operating in digital, global, and technology-driven environments.*

UNIT I: FOUNDATIONS OF BUSINESS ETHICS:

Meaning, nature, scope, objectives, and importance of business ethics; ethics, morality, values, beliefs, integrity, character, and professionalism; evolution of business ethics; ethics in Indian philosophy and contemporary management; ethical theories—Utilitarianism, Deontology, Virtue Ethics, Rights Theory, Justice Theory, Ethics of Care, Stakeholder Theory, Social Contract Theory; ethical relativism and universalism; determinants of ethical behaviour; ethical decision-making models; ethics and corporate culture; ethical leadership; ethical climate; codes of ethics and codes of conduct; whistleblowing and whistleblower protection; conflicts of interest; fraud, corruption, bribery, insider trading, money laundering, tax evasion, corporate misconduct, and ethical challenges in global business; ethical issues in marketing, finance, accounting, human resource management, production, supply chain management, e-commerce, digital platforms, and international business; role of ethics in building trust and organizational reputation.

UNIT II: CORPORATE GOVERNANCE: CONCEPTS, PRINCIPLES AND REGULATORY FRAMEWORK:

Meaning, evolution, objectives, significance, and principles of corporate governance; governance versus management; agency theory, stewardship theory, stakeholder theory, resource dependence theory, and institutional theory; governance models across countries; OECD Principles of Corporate Governance; Cadbury Committee Report; King Reports; Sarbanes–Oxley Act;

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corporate governance reforms in India; Companies Act, 2013—governance provisions; SEBI (Listing Obligations and Disclosure Requirements) Regulations; role of the Ministry of Corporate Affairs (MCA), Securities and Exchange Board of India (SEBI), National Financial Reporting Authority (NFRA), Institute of Chartered Accountants of India (ICAI), Institute of Company Secretaries of India (ICSI), Institute of Cost Accountants of India (ICMAI); governance mechanisms; rights of shareholders; protection of minority shareholders; transparency, disclosure, accountability, fairness, responsibility, and ethical compliance.

UNIT III: GOVERNANCE STRUCTURES, BOARD EFFECTIVENESS AND CORPORATE ACCOUNTABILITY:

Corporate governance architecture; ownership and control; board composition, structure, diversity, independence, qualifications, appointment, remuneration, responsibilities, and evaluation of directors; role of the Chairperson, Chief Executive Officer (CEO), Managing Director (MD), Chief Financial Officer (CFO), Company Secretary, Independent Directors, Nominee Directors, Women Directors, and Key Managerial Personnel (KMP); board committees—Audit Committee, Nomination and Remuneration Committee, Stakeholders Relationship Committee, Risk Management Committee, CSR Committee; internal control systems; enterprise risk management; compliance management; internal audit and statutory audit; auditor independence; forensic accounting; corporate fraud prevention; ethics committees; integrated reporting; business continuity planning; crisis management; stakeholder engagement; investor relations; corporate accountability and organizational resilience.

UNIT IV: CORPORATE SOCIAL RESPONSIBILITY, SUSTAINABILITY AND ESG:

Concept, philosophy, and evolution of Corporate Social Responsibility (CSR); Carroll's Pyramid of CSR; stakeholder approach to CSR; CSR under the Companies Act, 2013; planning, implementation, monitoring, and evaluation of CSR projects; CSR reporting; sustainability and sustainable development; United Nations Sustainable Development Goals (SDGs); Environmental, Social and Governance (ESG) framework; ESG investing; ESG ratings; Business Responsibility and Sustainability Reporting (BRSR); triple bottom line; integrated reporting; environmental ethics; climate governance; circular economy; green finance; responsible supply chains; diversity, equity and inclusion (DEI); human rights; labour standards; responsible consumption; impact assessment; social entrepreneurship; ethical investing; corporate citizenship; case studies of responsible business practices in India and globally.

UNIT V: EMERGING ISSUES IN BUSINESS ETHICS AND CORPORATE GOVERNANCE:

Ethics in the digital economy; ethical issues relating to artificial intelligence, machine learning, automation, algorithms, robotics, surveillance, facial recognition, big data, data privacy, cybersecurity, blockchain, cryptocurrency, fintech, digital platforms, gig economy, platform governance, intellectual property rights, misinformation, deepfakes, social media ethics, responsible innovation, and digital inclusion; governance challenges in multinational corporations; cross-cultural ethical issues; anti-corruption frameworks; anti-money laundering compliance; business and human rights; ethical leadership during crises; governance in family businesses, start-

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ups, public sector enterprises, cooperatives, NGOs, and social enterprises; integrated thinking; future of corporate governance; stakeholder capitalism; conscious capitalism; purpose-driven organizations; analysis of major corporate ethical failures and governance case studies including Enron, WorldCom, Satyam Computer Services, IL&FS, Yes Bank, Volkswagen Emissions Scandal, Wells Fargo, Wirecard, Theranos, FTX, and selected contemporary Indian corporate governance developments.

SUGGESTED READINGS:

1. Fernando, A. C. (2023). *Business Ethics and Corporate Governance* (3rd Edition). Pearson Education, New Delhi.
2. Crane, A., Matten, D., Glozer, S., & Spence, L. J. (2024). *Business Ethics: Managing Corporate Citizenship and Sustainability in the Age of Globalization* (6th Edition). Oxford University Press, Oxford.
3. Velasquez, M. G. (2023). *Business Ethics: Concepts and Cases* (9th Edition). Pearson Education, New York.
4. Mallin, C. A. (2024). *Corporate Governance* (7th Edition). Oxford University Press, Oxford.
5. Tricker, B. (2024). *Corporate Governance: Principles, Policies and Practices* (5th Edition). Oxford University Press, Oxford.
6. Sharma, J. P. (2023). *Corporate Governance, Business Ethics and CSR*. Ane Books Pvt. Ltd., New Delhi.
7. Kapoor, N. D. (Latest Edition). *Corporate Laws*. Sultan Chand & Sons, New Delhi.
8. Institute of Chartered Accountants of India (ICAI). *Study Material on Ethics and Corporate Governance*. New Delhi.
9. Securities and Exchange Board of India (SEBI). *SEBI (LODR) Regulations and Guidance Notes*. Mumbai.
10. Ministry of Corporate Affairs. *Companies Act, 2013* (Latest Amendments). Government of India, New Delhi.

MJR 502(a): BUSINESS ETHICS & CORPORATE GOVERNANCE

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	1	**3**	2	2	2	3
CO2	3	3	**3**	2	1	**3**	**3**	2	2	3
CO3	3	3	**3**	2	2	**3**	**3**	**3**	2	3
CO4	3	3	**3**	2	**3**	**3**	**3**	**3**	2	**3**
CO5	3	3	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**

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SEMESTER V

MJR 502 (b): AUDITING

PAPER CODE: MJR 502 (b) **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

Objective: *to understand meaning and elements of auditing and gain knowledge for execution of audit.*

Course Objectives:

1. Understand the meaning, evolution, objectives, and importance of auditing
2. Examine auditor qualifications, appointment, rights, duties, and liabilities
3. Analyze internal control, internal check, and internal audit systems
4. Apply vouching techniques for trading and cash transactions, including EDP environments
5. Evaluate verification and valuation of assets and liabilities and understand audit reporting

Course Outcomes:

1. Explain concepts, types of audit, and auditing standards issued by AASB
2. Describe the process of auditor appointment, removal, remuneration, and legal liabilities
3. Distinguish between internal control, internal check, and internal audit with their objectives
4. Perform vouching of various transactions and audit procedures in an EDP environment
5. Verify and value different assets and liabilities and understand the role of audit committees and audit reports

UNIT-1 INTRODUCTION TO AUDITING AND AUDITOR:

Auditing: Meaning – Definition – Evolution – Objectives- Advantages and Limitations of Audit- Types of Audit- Standards of Auditing – Procedure for issue of standards by AASB- SA 200 - overall objective of an independent auditor and conduct of an audit in accordance with standards of auditing.

Appointment of an Auditor – Qualification and Disqualification – Qualities – Remuneration – Removal – Rights – Duties – Civil and Criminal Liabilities of Auditors

UNIT-II -AUDIT ENGAGEMENT, PLANNING AND DOCUMENTATION:

AUDIT ENGAGEMENT:

Commencement of Audit –Engagement Letter-Agreeing the terms of Audit engagement

Audit Planning: Meaning and Objectives of Audit Planning- Nature and Extent of Planning- Audit Strategy- Relationship between Audit Strategy and Audit Plan -Contents of Audit Plan - Audit Programme - Circumstances Requiring Alteration of Audit Programme

Audit Documentation: Meaning and Importance -Permanent and current audit files – Audit Note Book – Audit Workbook/Audit working papers– Audit Markings

UNIT-III : RISK ASSESSMENT, MATERIALITY AND INTERNAL CONTROL:

Understanding the Entity and its Environment- Identifying and Assessing Risks of Material Misstatement at- Financial Statement level & Assertion level

Materiality in Audit- Meaning and significance of materiality-Materiality in Planning and Performing an Audit- Meaning of audit risk - Components of audit risk: Inherent Risk, Control Risk, Detection Risk - Risk of material misstatement -Relationship between materiality and audit risk

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Internal Control: Meaning and Objectives of Internal Control-Component of internal control –Internal Audit: Meaning and Scope of Internal Audit- Functions of Internal Audit- Roles and Responsibilities of Internal Auditor– Internal Check Vs. Internal Audit – Internal Control vs. Internal Audit- Internal Audit Vs External Audit

UNIT-IV AUDIT EVIDENCE AND AUDIT PROCEDURES:

Audit Evidence- Meaning and Definition- Importance- Concepts of Sufficiency and Appropriateness of Audit Evidence- Sources of Audit Evidence: Internal & External - Audit Procedures for Obtaining Evidence- Reliability of Audit Evidence

Auditor's Response to Assessed Risks-Audit Procedures-Test of Control -Substantive procedures: Analytical Procedures & Test of Details- – Vouching- Meaning & Objectives -Verification and Valuation of various Assets and Liabilities

UNIT-V: AUDIT COMPLETION AND AUDIT REPORTING:

Audit Completion Procedures: Subsequent Events- Going Concern Assessment- Written Representations from Management- Evaluation of Audit Findings

Audit Report- Elements of an Audit Report- Types of Audit Opinions- Emphasis of Matter and Other Matter Paragraph

SUGGESTED READINGS:

1. **Saxena, R.G., 2018,** *Principles and Practice of Auditing*, Himalaya Publishing House, Mumbai.
2. **Basu, S.K.,** *Auditing and Assurance for CA Integrated Professional Competence*, Pearson Education, New Delhi, **Latest Edition**.
3. **Kumar, Pradeep, 2024,** *Auditing*, Kalyani Publishers, New Delhi. **[Reprinted 2024]**
4. **Prasad, Jagadish, 1976,** *Auditing*, 12th Revised Edition, Kalyani Publishers, New Delhi.
5. **Mahitha,** *Auditing*, Himalaya Publishing House, Mumbai, **Latest Edition**.
6. **Sultana, Nazia,** *Auditing*, PBP Publications, **Latest Edition**.
7. **Jha, Aruna,** *Auditing*, Taxmann Publications, New Delhi, **Latest Edition**.
8. **Prakash, Jagdish,** *Auditing: Principles, Practices & Problems*, Kalyani Publishers, New Delhi, **Latest Edition**.
9. **Vaishnavi, R., and Soujanya, T. Laxmi,** *Auditing*, S.V. Publications, 1st Edition, **Latest Available Edition**.
10. **Ainapure, V. and Ainapure, M.,** *Auditing and Assurance*, PHI Learning Private Limited, New Delhi, **Latest Edition**.
11. **Pagare, Dinkar, 2016,** *Principles and Practice of Auditing*, Sultan Chand & Sons, New Delhi.
12. **Gupta, Kamal and Arora, Ashok,** *Fundamentals of Auditing*, Tata McGraw-Hill Publishing Company Limited, New Delhi, **Latest Edition**.
13. **Tandon, B.N., Sudharsanam, S. and Sundharabahu, S., 2003,** *A Handbook of Practical Auditing*, S. Chand & Company Ltd., New Delhi.
14. **Saxena, R.G. and Premalata,** *Auditing*, Himalaya Publishing House, Mumbai, **Latest Edition**.

MJR 502 (b): AUDITING

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	2	2	3	3	2	1	3
CO2	3	3	3	3	1	3	3	2	1	3
CO3	3	3	3	2	2	3	3	2	2	3
CO4	3	3	3	2	3	3	3	2	2	3
CO5	3	3	3	3	2	3	3	3	2	3

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SEMESTER V

Paper MJR 502 (c) : MOBILE APPLICATIONS

PAPER CODE: MJR 502 (c) **Max. Marks: 50U ++35P+15I=100**
THPW: 3T+4P; Credits: 5 **ESED: 2 hrs**

Objective: *To understand and apply the mobile applications.*

Course Objectives:
The course aims to enable students to:

1. *Understand the fundamentals of mobile application development and the Android platform.*
2. *Develop skills in designing and developing Android mobile applications.*
3. *Apply Android programming concepts to build interactive mobile applications.*
4. *Understand mobile data management, multimedia and location-based services.*
5. *Develop and deploy mobile applications using Android and Windows Phone development tools.*

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

1. *Explain the architecture and components of the Android operating system.*
2. *Design and develop Android applications using appropriate development tools.*
3. *Create mobile applications with user interfaces, data storage and multimedia features.*
4. *Implement mobile services such as messaging, location-based services and camera integration.*
5. *Develop, test and deploy mobile applications using modern mobile development frameworks.*

UNIT-I: INTRODUCTION:

What is Android, Android versions and its feature set The various Android devices on the market, The Android Market application store ,Android Development Environment - System Requirements, Android SDK, Installing Java, and ADT bundle - Eclipse Integrated Development Environment (IDE), Creating Android Virtual Devices (AVDs), the Android Software Stack, The Linux Kernel, Android Runtime - Dalvik Virtual Machine, Android Runtime – Core Libraries, Dalvik VM Specific Libraries, Java Interoperability Libraries, Android Libraries, Application Framework, Creating a New Android Project ,Defining the Project Name and SDK Settings, Project Configuration Settings, Configuring the Launcher Icon, Creating an Activity, Running the Application in the AVD, Stopping a Running Application, Modifying the Example Application, Reviewing the Layout and Resource Files,

UNIT-II: MOBILE SOFTWARE:

Understanding Java SE and the Dalvik Virtual Machine, The Directory Structure of an Android Project , Common Default Resources Folders, The Values Folder, Leveraging Android XML, Screen Sizes, Launching Your Application: The AndroidManifest.xml File,
Creating Your First Android Application, Android Application Components, Android Activities: Defining the UI, Android Services: Processing in the Background, Broadcast Receivers: Announcements and Notifications Content Providers: Data Management, Android Intent Objects: Messaging for Components.
Android Manifest XML: Declaring Your Components, Designing for Different Android Devices, Views and View Groups, Android Layout Managers, The View Hierarchy, Designing an Android User Interface using the Graphical Layout Tool.

UNIT-III: MOBILE DISPLAY:

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Displaying Text with TextView, Retrieving Data from Users, Using Buttons, Check Boxes and Radio Groups, Getting Dates and Times from Users, Using Indicators to Display Data to Users, Adjusting Progress with SeekBar, Working with Menus using views, Gallery, ImageSwitcher, GridView, and ImageView views to display images, Creating Animation, Saving and Loading Files, SQLite Databases, Android Database Design, Exposing Access to a Data Source through a Content Provider, Content Provider Registration, Native Content Providers

UNIT-IV: MOBILE APPLICATIONS:

Intent Overview, Implicit Intents, Creating the Implicit Intent Example Project, Explicit Intents, Creating the Explicit Intent Example Application, Intents with Activities, Intents with Broadcast Receivers, An Overview of Threads, The Application Main Thread, Thread Handlers, A Basic Threading Example, Creating a New Thread, Implementing a Thread Handler, Passing a Message to the Handler. Sending SMS Messages Programmatically, Getting Feedback after Sending the Message Sending SMS Messages Using Intent Receiving, sending email, Introduction to location-based service, configuring the Android Emulator for Location-Based Services, Geocoding and Map-Based Activities, Playing Audio and Video, Recording Audio and Video, Using the Camera to Take and Process Pictures

UNIT-V: MOBILE APP DEVELOPMENT & INSTALLATION:

Introduction to Windows Phone App Development, Installing the Windows Phone SDK, Creating Your First XAML for Windows Phone App. Understanding the Role of XAP Files, the Windows Phone Capabilities Model, the Threading Model for XAML-Based Graphics and Animation in Windows Phone, Understanding the Frame Rate Counter, The Windows Phone Application Analysis Tool, Reading Device Information, Applying the Model-View-View Model Pattern to a Windows Phone App, Property Change Notification, Using Commands

SUGGESTED READINGS:

1. Erik Hellman, “Android Programming – Pushing the Limits”, 1st Edition, Wiley India Pvt Ltd, 2014.
2. Dawn Griffiths and David Griffiths, “Head First Android Development”, 1st Edition, O’Reilly SPD Publishers, 2015
3. J F DiMarzio, “Beginning Android Programming with Android Studio”, 4th Edition, Wiley India Pvt Ltd, 2016. ISBN-13: 978-8126565580
4. Anubhav Pradhan, Anil V Deshpande, “ Composing Mobile Apps” using Android, Wiley 2014, ISBN: 978-81-265-4660-2

Web Resource :

Google Developer Training, "Android Developer Fundamentals Course – Concept Reference”, Google Developer Training Team, 2017. https://www.gitbook.com/book/google-developer-training/android-developerfundamentals-course-concepts/details (Download pdf file from the above link)

MJR 502(c): MOBILE APPLICATIONS

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	1	**3**	1	1	2	1	**3**
CO2	3	3	**3**	2	**3**	1	2	**3**	2	**3**
CO3	3	3	**3**	2	**3**	2	2	**3**	2	**3**
CO4	3	3	**3**	2	**3**	**3**	2	**3**	2	**3**
CO5	3	3	**3**	2	**3**	2	2	**3**	**3**	**3**

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SEMESTER V

MDC 503(a) : INTRODUCTION TO ACCOUNTING

PAPER CODE: MJR 503 (a) **Max. Marks: 80U +20I=100**
THPW: 4; Credits: 4 **ESED: 3 hrs**

Course Objectives

The course aims to enable students to:

1. *Appreciate the role of accounting in everyday life and professional decision-making.*
2. *Understand the basic principles and concepts underlying accounting.*
3. *Record business transactions using journals, ledgers, and subsidiary books.*
4. *Prepare basic financial statements.*
5. *Develop financial literacy applicable to personal and organizational contexts.*
6. *Understand recent developments in accounting technology and digital financial reporting.*

Course Outcomes

After completing this course, the student will be able to:

1. *Explain accounting concepts and their relevance in daily life and organizations.*
2. *Apply accounting principles while recording financial transactions.*
3. *Prepare journals, ledgers, subsidiary books, cash books, bank reconciliation statements and trial balance.*
4. *Prepare simple Manufacturing Account, Trading Account, Profit & Loss Account and Balance Sheet.*
5. *Understand digital accounting, AI, sustainability reporting and future developments in accounting.*

UNIT I: FINANCIAL LITERACY AND FOUNDATIONS OF ACCOUNTING:

Why Everyone Needs Accounting: Money Management –Budgeting - Income and Expenditure – Savings - Investments - Borrowing - Financial Decision Making; Introduction to Accounting: Evolution of Accounting - Meaning – Definition – Objectives - Scope –Functions - Importance of Accounting; Accounting, Bookkeeping and Accountancy: Difference between, Accounting, Bookkeeping, Accountancy; Users of Accounting Information: Owners – Managers - Investors - Banks – Government – Employees – Customers – Society; Branches of Accounting: Financial Accounting - Cost Accounting - Management Accounting-Tax Accounting -Government Accounting-Social Accounting -Environmental Accounting -Forensic Accounting; Introduction to Business Organisations: Sole Proprietorship-Partnership-Company-Cooperative Society

UNIT II: UNDERSTANDING THE ACCOUNTING PROCESS:

The Accounting Cycle: Transaction-Source Document-Journal-Ledger-Trial Balance-
Final Accounts- Financial Statements; Accounting Equation: Assets-Liabilities-Capital-Business Transactions; Accounting Concepts: Business Entity-Going Concern-Money Measurement-Cost
Dual Aspect -Accounting Period -Matching -Revenue Recognition -Accrual -Realisation -Materiality - Conservatism –Consistency; Accounting Principles: GAAP-Accounting Conventions;
Introduction to Accounting Standards: Meaning-Objectives-Need-Indian Accounting Standards (Overview);
Classification of Accounts: Personal-Real-Nominal-Golden Rules-Accounting Vouchers-Journal Entries (Simple Problems)

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UNIT III: RECORDING AND CLASSIFYING BUSINESS TRANSACTIONS:

Ledger: Posting-Balancing; Subsidiary Books-Purchases Book -Sales Book-Purchase Returns Book-Sales Returns Book -Bills Receivable Book -Bills Payable Book -Journal Proper; Cash Book: Single Column-Double Column -Triple Column -Petty Cash Book -Imprest System; Pass Book: Meaning-Importance-Why Cash Book and Pass Book Do Not Agree-Cheques Issued but not Presented -Cheques Deposited but not Collected -Bank Charges-Interest -Direct Deposits -Standing Instructions –Errors; Bank Reconciliation Statement:Need-Preparation(Simple Problems)

UNIT IV: PREPARING FINANCIAL STATEMENTS:

Trial Balance: Meaning-Objectives-Preparation-Methods; Errors in Accounting: Errors of Omission -Errors of Commission -Errors of Principle -Compensating Errors -Rectification(Simple Problems);
Capital and Revenue: Capital Expenditure-Revenue Expenditure -Deferred Revenue Expenditure;
Preparation of Final Accounts: Manufacturing Account-Trading Account-Profit & Loss Account-Balance Sheet(Simple Problems without Adjustments); Interpretation of Financial Statements: What do Profit, Loss, Assets and Liabilities tell us?- How do banks use financial statements? - How do investors use financial statements?

UNIT V: ACCOUNTING IN THE DIGITAL ECONOMY:

Computerised Accounting: Manual vs Computerised Accounting-Advantages-Limitations; Accounting Software: Tally-ERP -Cloud Accounting; Digital Finance:UPI -Internet Banking-QR Payments -Digital Receipts -GST (Basic Introduction); Emerging Trends: Artificial Intelligence in Accounting-Machine Learning-Robotic Process Automation-Blockchain-Data Analytics-Cloud Computing; Sustainability and Ethics: ESG Reporting-Integrated Reporting-Carbon Accounting-Ethics in Accounting-Forensic Accounting-Fraud Detection; Future of Accounting Profession:
Skills for Future Accountants-Accounting Careers-Accounting for Entrepreneurs-Accounting for Researchers-Accounting for NGOs-Accounting for Government.

SUGGESTED READINGS:

1. **Grewal, T.S., 2026,** *T.S. Grewal's Accountancy: Theory and Practice*, Latest Edition, Sultan Chand & Sons, New Delhi.
2. **Jain, S.P. and Narang, K.L., 2023,** *Financial Accounting*, 1st Edition, Kalyani Publishers, New Delhi. *Note: Kalyani's current catalogue contains several university-specific editions of this title; the exact edition should be matched with the copy prescribed by the department.*
3. **Maheshwari, S.N., Maheshwari, S.K. and Maheshwari, S.K., 2018,** *Financial Accounting*, 6th Edition, Vikas Publishing House, New Delhi.
4. **Atrill, P. and McLaney, E.,** *Accounting and Finance for Non-Specialists*, Pearson Education, Harlow, **Latest Edition**.
5. **Horngren, C.T. et al.,** *Accounting*, Pearson Education, **Latest Edition**.

PROFESSIONAL REFERENCES

6. **Institute of Chartered Accountants of India (ICAI), 2024,** *Foundation Course – Paper 1: Accounting, Study Material*, Board of Studies (Academic), ICAI, New Delhi. **Reprint: August 2025 and onwards.**
7. **Institute of Cost Accountants of India (ICMAI), 2025,** *Fundamentals of Financial and Cost Accounting*, ICMAI, Kolkata, **Latest Applicable Edition**.
8. **Ministry of Corporate Affairs, Government of India, Latest Applicable Version,** *Indian Accounting Standards (Ind AS)*, Ministry of Corporate Affairs, New Delhi.

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MDC 503(a): INTRODUCTION TO ACCOUNTING

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	2	2	**3**	2	1	3
CO2	3	3	**3**	1	2	2	**3**	2	1	3
CO3	3	**3**	**3**	2	**3**	1	**3**	2	1	3
CO4	3	**3**	**3**	2	**3**	2	**3**	**3**	1	3
CO5	3	3	**3**	2	**3**	**3**	**3**	**3**	2	**3**

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SEMESTER V

MDC 503(b) : PRINCIPLES OF MANAGEMENT

PAPER CODE: MDC 503 (b) **Max. Marks: 80U +20I=100**
THPW: 4; Credits: 4 **ESED: 3 hrs**

Course Objectives

The course aims to enable students to:

1. *Understand the meaning, nature, and importance of management.*
2. *Develop managerial thinking and problem-solving skills.*
3. *Learn the fundamental functions of management.*
4. *Understand leadership, motivation, teamwork, and communication.*
5. *Appreciate ethics, sustainability, entrepreneurship, and innovation in management.*
6. *Apply management concepts in personal, academic, professional, and social contexts.*

Course Outcomes

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

1. Explain the fundamental concepts and evolution of management.
2. Apply planning, organizing, staffing, directing, and controlling principles to real-life situations.
3. Demonstrate leadership, communication, teamwork, and decision-making skills.
4. Analyse organizational challenges using basic management principles.
5. Appreciate emerging trends such as digital management, AI, sustainability, entrepreneurship, and innovation.

UNIT I: INTRODUCTION TO MANAGEMENT AND MANAGERIAL THINKING:

Why Everyone Needs Management: Managing Self -Managing Time-Managing Resources-Managing Teams-Managing Projects-Managing Careers; Introduction to Management: Meaning -Definitions – Nature-Characteristics-Importance-Scope; Evolution of Management Thought-Scientific Management – F.W. Taylor, Administrative Theory – Henri Fayol, Bureaucratic Theory – Max Weber, Human Relations Approach – Elton Mayo, Behavioural Approach, Systems Approach, Contingency Approach; Levels of Management: Top-Middle-Lower; Managerial Skills: Technical Skills-Human Skills-Conceptual Skills-Digital Skills-Emotional Intelligence.

UNIT II: PLANNING AND DECISION MAKING:

Planning: Meaning –Importance-Planning Process; Types of Plans: Objectives-Policies-Procedures – Rules-Programmes-Budgets-Strategies; Decision Making: Meaning-Importance-Steps in Decision Making; Problem Solving: Creative Thinking-Critical Thinking-SWOT Analysis-Brainstorming; Time Management: Goal Setting-Prioritization-Productivity Techniques -Managing Academic and Professional Work.

UNIT III: ORGANISING, STAFFING AND TEAM MANAGEMENT:

Organising: Meaning-Principles-Organisation Structure; Departmentation: Functional-Product –Customer-Geographic; Delegation: -Authority-Responsibility- Accountability; Staffing: Recruitment-Selection-Training-Performance Evaluation; Team Management: Team Building-Collaboration-Conflict Management-Diversity and Inclusion.

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UNIT IV: LEADERSHIP, MOTIVATION AND COMMUNICATION:

Leadership: Meaning-Characteristics-Leadership Styles; Motivation: Meaning-Importance -Brief Introduction to-Maslow, Herzberg, McGregor; Communication: Process-Types-Barriers-Digital Communication; Coordination: Importance-Principles; Control: Meaning-Process-Types -Performance Measurement.

UNIT V: CONTEMPORARY MANAGEMENT PRACTICES:

Ethics and Corporate Governance: Business Ethics-Corporate Social Responsibility (CSR)-Responsible Leadership; Innovation and Entrepreneurship: Innovation-Creativity-Start-Ups-Design Thinking-Entrepreneurial Mindset; Digital Transformation: Artificial Intelligence-Data Analytics-Automation - Remote Work-Digital Collaboration Tools; Sustainable Management: Sustainable Development Goals (SDGs)-Green Management-Circular Economy-Social Impact; The Future Manager - Essential Employability Skills: Adaptability-Lifelong Learning-Emotional Intelligence-Cross-cultural Competence-Ethical Decision Making.

SUGGESTED READING:

1. Robbins, S. P., Coulter, M., DeCenzo, D. A., & Wolter, R. M. (2023). Fundamentals of Management (11th Global Edition). Pearson Education Limited, Harlow, United Kingdom.
2. Griffin, R. W. (2022). Fundamentals of Management (9th Edition). Cengage Learning, Boston, USA.
3. Kinicki, A., & Williams, B. K. (2023). Management: A Practical Introduction (10th Edition). McGraw-Hill Education, New York, USA.
4. Koontz, H., Weihrich, H., & Cannice, M. V. (2020). Essentials of Management: An International, Innovation and Leadership Perspective (11th Edition). McGraw-Hill Education, New York, USA.
5. Stoner, J. A. F., Freeman, R. E., & Gilbert, D. R. (Latest Indian Reprint). Management. Pearson Education.
6. Gupta, C. B. (2023). *Business Management*. Sultan Chand & Sons, New Delhi.
7. Prasad, L. M. (2023). *Principles and Practice of Management*. Sultan Chand & Sons, New Delhi.
8. Chhabra, T. N. (2022). *Principles and Practice of Management*. Dhanpat Rai Publishing Company, New Delhi.
9. Tripathi, P. C., & Reddy, P. N. (2022). *Principles of Management*. McGraw-Hill Education (India), New Delhi.
10. Rao, V. S. P., & Krishna, V. H. (2022). *Management: Text and Cases*. Excel Books, New Delhi.
11. Drucker, P. F. (2008). *Management* (Revised Edition). Harper Business, New York.
12. Mintzberg, H. (2009). *Managing*. Berrett-Koehler Publishers, San Francisco.
13. Fayol, H. (2016 Reprint). *General and Industrial Management*. Martino Fine Books.

MDC 503(b): PRINCIPLES OF MANAGEMENT

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	1	2	2	2	1	3
CO2	3	3	3	3	1	2	3	3	2	3
CO3	3	3	3	3	2	3	3	3	3	3
CO4	3	3	3	3	2	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3

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SEMESTER V

MDC SEC1(a) : COMMUNICATION SKILLS

PAPER CODE: SEC1 (a) **Max. Marks: 40U**
+10I=50
THPW: 2; Credits: 2 **ESED: 2 hrs**

Course Objectives

The course aims to enable students to:

1. *Develop effective verbal, non-verbal, written, and digital communication skills.*
2. *Improve listening, speaking, reading, and writing competencies.*
3. *Build confidence in interpersonal and professional communication.*
4. *Develop presentation, group discussion, interview, and public speaking skills.*
5. *Enhance workplace communication and employability skills.*
6. *Use communication ethically and effectively in diverse professional environments.*

Course Outcomes

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

1. *Demonstrate effective verbal and non-verbal communication in academic and professional settings.*
2. *Apply listening, reading, writing, and presentation skills appropriately.*
3. *Communicate confidently in teams, meetings, interviews, and public speaking situations.*
4. *Prepare professional correspondence and use digital communication tools effectively.*
5. *Exhibit interpersonal skills, workplace etiquette, emotional intelligence, and ethical communication practices.*

UNIT I: FOUNDATIONS OF EFFECTIVE COMMUNICATION AND PERSONAL COMMUNICATION SKILLS:

Communication: Meaning, Definition, Objectives, Scope, Importance, Process, and Characteristics; Elements of communication; Communication cycle; Principles of effective communication (7 Cs of Communication); Types of communication—verbal, non-verbal, written, oral, visual, formal, informal, upward, downward, horizontal, diagonal, and digital communication; Channels of communication; Barriers to communication and strategies for overcoming them.

Listening skills: Importance of listening, hearing versus listening, active listening, empathetic listening, appreciative listening, critical listening, barriers to effective listening, techniques for improving listening.

Speaking skills: pronunciation, articulation, fluency, clarity, voice modulation, vocabulary enhancement, confidence building, overcoming stage fear, extempore speaking, storytelling, persuasive speaking, public speaking, presentation skills, seminar presentation, classroom interaction.

Non-verbal communication: body language, posture, gestures, facial expressions, eye contact, personal appearance, proxemics, paralanguage, time management (chronemics), professional etiquette, cross-cultural communication.

Interpersonal communication: self-awareness, self-confidence, emotional intelligence, empathy, teamwork, collaboration, conflict resolution, negotiation skills, assertiveness, networking, relationship building, communication in multicultural environments.

UNIT II: PROFESSIONAL, WORKPLACE AND DIGITAL COMMUNICATION SKILLS:

Written communication: Principles of effective writing; Paragraph writing; Note-making; Précis writing; Report writing; Business correspondence; Formal letters; Email writing; Office memoranda; Notices; Agenda and Minutes of meetings; Resume/curriculum vitae preparation; Statement of purpose; Cover letter; Social media communication; Professional messaging etiquette.

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Professional communication: Workplace communication, Communication with colleagues, Supervisors, Clients, Customers and Stakeholders; Telephone etiquette; Meeting etiquette; Business meetings; Professional presentations; Interviewing skills; Interview preparation; HR interview; Group interview; Online interview; Networking skills.

Digital communication: Communication through email, Video conferencing, Collaborative platforms, Instant messaging, Social media; Digital etiquette (Netiquette); Online professionalism; Cybersecurity awareness in communication; Responsible use of digital media; AI-assisted communication tools; Ethical use of technology in communication.

Employability communication skills: Customer service communication, Problem-solving Communication, Leadership communication, Persuasive communication, Conflict management, Workplace ethics, Cross-cultural communication, Communication for entrepreneurship, Communication for start-ups, Communication in service industries, Communication for innovation and teamwork.

SUGGESTED READING

1. Raman, M., & Singh, P. (2023). Business Communication (3rd Edition). Oxford University Press, New Delhi.
2. Lesikar, R. V., Flatley, M. E., & Rentz, K. (2022). Business Communication: Making Connections in a Digital World (14th Edition). McGraw-Hill Education, New York.
3. Murphy, H. A., Hildebrandt, H. W., & Thomas, J. P. (2021). Effective Business Communication (7th Edition). McGraw-Hill Education.
4. Bovee, C. L., & Thill, J. V. (2023). Business Communication Today (15th Edition). Pearson Education.
5. Penrose, J. M., Rasberry, R. W., & Myers, R. J. (2022). Advanced Business Communication (6th Edition). Cengage Learning.
6. Chaturvedi, P. D., & Chaturvedi, M. (2023). Business Communication: Concepts, Cases and Applications. Pearson India.
7. Rai, U., & Rai, S. M. (2022). Business Communication. Himalaya Publishing House, Mumbai.
8. Meenakshi Raman. (2023). Technical Communication: Principles and Practice. Oxford University Press, New Delhi.
9. Pillai, S. (2022). Effective Communication Skills. S. Chand Publishing, New Delhi.

SEC1(a): COMMUNICATION SKILLS

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	3	2	**3**	2	2	2	2	**3**	3
CO2	2	3	2	**3**	2	2	2	2	**3**	3
CO3	2	3	2	**3**	2	2	3	3	**3**	3
CO4	2	3	2	**3**	**3**	3	2	3	3	3
CO5	2	3	3	**3**	2	**3**	3	3	**3**	3

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SEMESTER V

MDC SEC1(b) : PROFESSIONAL DEVELOPMENT SKILLS

PAPER CODE: SEC1 (b) **Max. Marks: 40U +10I=50**
THPW: 2; Credits: 2 **ESED: 2 hrs**

Course Objectives:

The course aims to enable students to:

1. *Develop professional attitudes, work ethics, and workplace readiness.*
2. *Build essential employability and career management skills.*
3. *Enhance critical thinking, problem-solving, decision-making, and leadership abilities.*
4. *Strengthen interpersonal effectiveness, teamwork, and emotional intelligence.*
5. *Improve digital literacy, professional etiquette, and lifelong learning competencies.*
6. *Prepare students for careers, entrepreneurship, higher education, and competitive examinations.*

Course Outcomes:

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

1. *Demonstrate professional behaviour, workplace ethics, and personal effectiveness.*
2. *Apply critical thinking, decision-making, and problem-solving techniques in academic and workplace situations.*
3. *Exhibit teamwork, leadership, adaptability, emotional intelligence, and interpersonal effectiveness.*
4. *Prepare career development documents and perform confidently in professional selection processes.*
5. *Use digital technologies responsibly and develop continuous learning strategies for career growth.*

UNIT I: PERSONAL EFFECTIVENESS AND PROFESSIONAL COMPETENCIES

Professionalism: meaning, characteristics, importance, professional values, integrity, accountability, responsibility, reliability, work discipline, positive attitude, workplace ethics, professional image, personal branding, self-awareness, self-confidence, self-esteem, growth mindset, emotional intelligence, resilience, adaptability, stress management, work-life balance, personal productivity, time management, goal setting, prioritization techniques, habit formation, lifelong learning, reflective practice.

Critical thinking: analytical thinking, logical reasoning, creative thinking, innovation, design thinking, problem-solving approaches, decision-making models, systems thinking, risk assessment, ethical decision-making.

Leadership and teamwork: leadership styles, situational leadership, collaboration, team roles, conflict resolution, negotiation skills, networking, diversity and inclusion, cross-cultural sensitivity, professional etiquette, business etiquette, office behaviour, meeting etiquette, workplace conduct, organizational citizenship behaviour.

Digital professionalism: digital identity, online reputation management, cybersecurity awareness, responsible social media usage, digital collaboration platforms, AI-assisted productivity tools, data privacy, ethical use of technology in professional environments.

UNIT II: CAREER READINESS, EMPLOYABILITY AND WORKPLACE SUCCESS

Career planning: career exploration, career mapping, identifying career opportunities, higher education pathways, entrepreneurship opportunities, public sector careers, competitive examinations, professional certifications, lifelong career development.

Employability skills: workplace expectations, adaptability, initiative, accountability, customer orientation, service excellence, workplace professionalism, organizational culture, business etiquette, networking skills.

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Career documents: résumé preparation, curriculum vitae, cover letter, statement of purpose, professional portfolio, LinkedIn profile, digital portfolio, personal branding.
Selection processes: aptitude awareness, group discussions, personal interviews, HR interviews, technical interviews, behavioural interviews, case interviews, presentation skills, interview etiquette, online interviews, assessment centres.
Workplace effectiveness: project management basics, workplace communication, meeting management, documentation, report writing, professional email etiquette, business presentations, workplace problem-solving, decision-making, innovation, entrepreneurship, intrapreneurship.
Financial and professional awareness: financial planning for young professionals, salary structures, taxation basics, workplace rights and responsibilities, labour laws (introductory), ethics in employment, sustainability, corporate social responsibility, diversity, equity and inclusion (DEI), future skills for Industry 5.0, artificial intelligence in the workplace, freelancing, gig economy, remote work, continuous upskilling.

SUGGESTED READING:

1. Covey, S. R. (2020). The 7 Habits of Highly Effective People (30th Anniversary Edition). Simon & Schuster, New York.
2. Carnegie, D. (2022). How to Win Friends and Influence People. Simon & Schuster, New York.
3. Maxwell, J. C. (2021). Developing the Leader Within You 2.0. HarperCollins Leadership, Nashville.
4. Goleman, D. (2020). Emotional Intelligence: Why It Can Matter More Than IQ. Bloomsbury Publishing, London.
5. Tracy, B. (2021). Eat That Frog!: 21 Great Ways to Stop Procrastinating and Get More Done (4th Edition). Berrett-Koehler Publishers, Oakland.
6. Dhingra, R., & Dhingra, S. (2023). Professional Communication and Soft Skills. S. Chand Publishing, New Delhi.
7. Rao, M. S. (2022). Soft Skills: Enhancing Employability. I. K. International Publishing House, New Delhi.
8. Wadhwa, B. (2022). Career Development and Employability Skills. Himalaya Publishing House, Mumbai.
9. Butterfield, J. (2022). Professional Development. Cengage Learning, Boston.

Online Resources

- National Career Service (Government of India): https://www.ncs.gov.in
- Skill India Mission: https://www.skillindia.gov.in
- National Skill Development Corporation (NSDC): https://www.nsdcindia.org
- LinkedIn Learning: https://www.linkedin.com/learning
- World Economic Forum – Future of Jobs: https://www.weforum.org
- Ministry of Skill Development and Entrepreneurship: https://www.msde.gov.in

SEC1(b): PROFESSIONAL DEVELOPMENT SKILLS

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	3	2	3	2	**3**	2	2	**3**	3
CO2	2	3	**3**	3	2	2	**3**	3	2	3
CO3	2	3	**3**	3	2	**3**	3	3	**3**	3
CO4	2	3	2	**3**	2	3	2	**3**	**3**	3
CO5	2	3	2	3	**3**	**3**	2	3	3	**3**

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CO/PO PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO10

SEMESTER V

MDC SEC1(c) : ENTREPRENEURSHIP AND START-UPS

PAPER CODE: SEC1 (c) **Max. Marks: 40U +10I=50**

THPW: 2; Credits: 2 **ESED: 2 hrs**

Course Objectives

The course aims to enable students to:

1. *Develop an entrepreneurial mindset and innovative thinking.*
2. *Identify and evaluate business opportunities.*
3. *Understand the process of starting and managing a new venture.*
4. *Prepare basic business models and business plans.*
5. *Understand funding sources, government support, and legal requirements for start-ups.*
6. *Appreciate ethical, sustainable, and technology-driven entrepreneurship.*

Course Outcomes

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

1. *Explain the concepts, characteristics, and importance of entrepreneurship and start-ups.*
2. *Identify entrepreneurial opportunities using creativity, innovation, and market analysis.*
3. *Develop basic business models and prepare simple business plans.*
4. *Understand funding options, government initiatives, and legal aspects of starting a business.*
5. *Demonstrate entrepreneurial thinking, problem-solving, and innovation skills applicable to new venture creation.*

UNIT I: ENTREPRENEURIAL MINDSET AND VENTURE CREATION:

Entrepreneurship: meaning, nature, characteristics, importance, myths and realities of entrepreneurship; entrepreneurship as a career; role of entrepreneurship in economic development, employment generation, innovation, wealth creation, and social transformation; characteristics and competencies of successful entrepreneurs; entrepreneurial mindset; creativity, innovation, opportunity recognition, problem-solving, risk-taking, resilience, adaptability, leadership, and ethical entrepreneurship.

Types of entrepreneurship: small business entrepreneurship, scalable start-ups, social entrepreneurship, women entrepreneurship, rural entrepreneurship, agripreneurship, green entrepreneurship, digital entrepreneurship, family business entrepreneurship, technology entrepreneurship, intrapreneurship, and student entrepreneurship.

Entrepreneurial process: identifying business opportunities, opportunity assessment, market gaps, customer needs, value proposition, idea generation techniques, brainstorming, design thinking, lean start-up approach, feasibility analysis, market research, business model innovation, Business Model Canvas, value chain, competitive advantage, and minimum viable product (MVP).

Entrepreneurial ecosystem: role of universities, incubators, accelerators, mentors, angel investors, venture capitalists, banks, government agencies, industry associations, innovation hubs, and entrepreneurship development institutions.

UNIT II: START-UP MANAGEMENT AND GROWTH:

Business planning: preparing a business plan; executive summary; marketing plan; operations plan; financial projections; risk analysis; growth strategy; business pitching.

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Legal aspects of starting a business: choice of business organization; registration procedures; intellectual property rights (patents, trademarks, copyrights); licensing; GST registration (introductory); taxation basics; regulatory compliance; ethics in entrepreneurship.

Financing start-ups: bootstrapping, family financing, bank loans, microfinance, Mudra loans, Stand-Up India, Start-up India, PMEGP, SIDBI support, crowdfunding, angel investment, venture capital, incubator funding, accelerator programmes, grants, and government incentives.
Marketing for start-ups: branding, customer acquisition, digital marketing, social media marketing, e-commerce, online marketplaces, customer relationship management, pricing, sales strategies, and growth hacking.

Managing and scaling start-ups: operations management, human resource management, financial management, networking, partnerships, negotiation, crisis management, business failure, turnaround strategies, exit strategies, mergers and acquisitions (introductory), sustainability, ESG considerations, social entrepreneurship, ethical entrepreneurship, AI in entrepreneurship, Industry 5.0, future in India.

SUGGESTED READING

1. Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2023). Entrepreneurship (12th Edition). McGraw-Hill Education, New York.
2. Kuratko, D. F. (2022). Entrepreneurship: Theory, Process and Practice (12th Edition). Cengage Learning, Boston.
3. Barringer, B. R., & Ireland, R. D. (2021). Entrepreneurship: Successfully Launching New Ventures (7th Edition). Pearson Education, Harlow.
4. Ries, E. (2017). The Lean Startup. Penguin Books, London.
5. Osterwalder, A., & Pigneur, Y. (2010). Business Model Generation. John Wiley & Sons, Hoboken.
6. Khanka, S. S. (2022). Entrepreneurial Development. S. Chand Publishing, New Delhi.
7. Desai, V. (2022). Dynamics of Entrepreneurial Development and Management. Himalaya Publishing House, Mumbai.
8. Gupta, C. B., & Srinivasan, N. P. (2023). Entrepreneurship Development in India. Sultan Chand & Sons, New Delhi.
9. Raj Shankar. (2023). Entrepreneurship Development. Margham Publications, Chennai.

Online Resources

- Startup India: https://www.startupindia.gov.in
- Ministry of Micro, Small and Medium Enterprises (MSME): https://www.msme.gov.in
- Small Industries Development Bank of India (SIDBI): https://www.sidbi.in
- National Skill Development Corporation (NSDC): https://www.nsdcindia.org
- Atal Innovation Mission: https://aim.gov.in
- Invest India: https://www.investindia.gov.in

SEC1(c): ENTREPRENEURSHIP AND START-UPS

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	2	2	2	**3**	1	3

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CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO2	3	3	**3**	2	2	2	**3**	**3**	2	3
CO3	3	**3**	**3**	3	2	2	**3**	**3**	2	3
CO4	3	**3**	3	2	2	**3**	**3**	**3**	1	3
CO5	3	**3**	**3**	3	**3**	**3**	**3**	**3**	2	**3**

SEMESTER V

MDC SEC2 (a) : PROFESSIONAL DEVELOPMENT SKILLS

PAPER CODE: SEC2 (a) **Max. Marks: 40U +10I=50**
THPW: 2; Credits: 2 **ESED: 2 hrs**

Course Objectives:

The course aims to enable students to:

1. *Develop professional attitudes, work ethics, and workplace readiness.*
2. *Build essential employability and career management skills.*
3. *Enhance critical thinking, problem-solving, decision-making, and leadership abilities.*
4. *Strengthen interpersonal effectiveness, teamwork, and emotional intelligence.*
5. *Improve digital literacy, professional etiquette, and lifelong learning competencies.*
6. *Prepare students for careers, entrepreneurship, higher education, and competitive examinations.*

Course Outcomes:

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

1. *Demonstrate professional behaviour, workplace ethics, and personal effectiveness.*
2. *Apply critical thinking, decision-making, and problem-solving techniques in academic and workplace situations.*
3. *Exhibit teamwork, leadership, adaptability, emotional intelligence, and interpersonal effectiveness.*
4. *Prepare career development documents and perform confidently in professional selection processes.*
5. *Use digital technologies responsibly and develop continuous learning strategies for career growth.*

UNIT I: PERSONAL EFFECTIVENESS AND PROFESSIONAL COMPETENCIES

Professionalism: meaning, characteristics, importance, professional values, integrity, accountability, responsibility, reliability, work discipline, positive attitude, workplace ethics, professional image, personal branding, self-awareness, self-confidence, self-esteem, growth mindset, emotional intelligence, resilience, adaptability, stress management, work-life balance, personal productivity, time management, goal setting, prioritization techniques, habit formation, lifelong learning, reflective practice.

Critical thinking: analytical thinking, logical reasoning, creative thinking, innovation, design thinking, problem-solving approaches, decision-making models, systems thinking, risk assessment, ethical decision-making.

Leadership and teamwork: leadership styles, situational leadership, collaboration, team roles, conflict resolution, negotiation skills, networking, diversity and inclusion, cross-cultural sensitivity, professional etiquette, business etiquette, office behaviour, meeting etiquette, workplace conduct, organizational citizenship behaviour.

Digital professionalism: digital identity, online reputation management, cybersecurity awareness, responsible social media usage, digital collaboration platforms, AI-assisted productivity tools, data privacy, ethical use of technology in professional environments.

UNIT II: CAREER READINESS, EMPLOYABILITY AND WORKPLACE SUCCESS

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Career planning: career exploration, career mapping, identifying career opportunities, higher education pathways, entrepreneurship opportunities, public sector careers, competitive examinations, professional certifications, lifelong career development.
Employability skills: workplace expectations, adaptability, initiative, accountability, customer orientation, service excellence, workplace professionalism, organizational culture, business etiquette, networking skills.
Career documents: résumé preparation, curriculum vitae, cover letter, statement of purpose, professional portfolio, LinkedIn profile, digital portfolio, personal branding.
Selection processes: aptitude awareness, group discussions, personal interviews, HR interviews, technical interviews, behavioural interviews, case interviews, presentation skills, interview etiquette, online interviews, assessment centres.
Workplace effectiveness: project management basics, workplace communication, meeting management, documentation, report writing, professional email etiquette, business presentations, workplace problem-solving, decision-making, innovation, entrepreneurship, intrapreneurship.
Financial and professional awareness: financial planning for young professionals, salary structures, taxation basics, workplace rights and responsibilities, labour laws (introductory), ethics in employment, sustainability, corporate social responsibility, diversity, equity and inclusion (DEI), future skills for Industry 5.0, artificial intelligence in the workplace, freelancing, gig economy, remote work, continuous up skilling.

SUGGESTED READING

10. Covey, S. R. (2020). *The 7 Habits of Highly Effective People* (30th Anniversary Edition). Simon & Schuster, New York.
11. Carnegie, D. (2022). *How to Win Friends and Influence People*. Simon & Schuster, New York.
12. Maxwell, J. C. (2021). *Developing the Leader Within You 2.0*. HarperCollins Leadership, Nashville.
13. Goleman, D. (2020). *Emotional Intelligence: Why It Can Matter More Than IQ*. Bloomsbury Publishing, London.
14. Tracy, B. (2021). *Eat That Frog!: 21 Great Ways to Stop Procrastinating and Get More Done* (4th Edition). Berrett-Koehler Publishers, Oakland.
15. Dhingra, R., & Dhingra, S. (2023). *Professional Communication and Soft Skills*. S. Chand Publishing, New Delhi.
16. Rao, M. S. (2022). *Soft Skills: Enhancing Employability*. I. K. International Publishing House, New Delhi.
17. Wadhwa, B. (2022). *Career Development and Employability Skills*. Himalaya Publishing House, Mumbai.
18. Butterfield, J. (2022). *Professional Development*. Cengage Learning, Boston.

Online Resources

- National Career Service (Government of India): https://www.ncs.gov.in
- Skill India Mission: https://www.skillindia.gov.in
- National Skill Development Corporation (NSDC): https://www.nsdcindia.org
- LinkedIn Learning: https://www.linkedin.com/learning
- World Economic Forum – Future of Jobs: https://www.weforum.org
- Ministry of Skill Development and Entrepreneurship: https://www.msde.gov.in

SEC1(b): PROFESSIONAL DEVELOPMENT SKILLS

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	3	2	3	2	**3**	2	2	**3**	3
CO2	2	3	**3**	3	2	2	**3**	3	2	3

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CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO3	2	3	**3**	3	2	**3**	3	3	**3**	3
CO4	2	3	2	**3**	2	3	2	**3**	**3**	3
CO5	2	3	2	3	**3**	**3**	2	3	3	**3**

SEMESTER V

MDC SEC2(b) : COMMUNICATION SKILLS

PAPER CODE: SEC2 (b) **Max. Marks: 40U +10I=50**
THPW: 2; Credits: 2 **ESED: 2 hrs**

Course Objectives

The course aims to enable students to:

1. *Develop effective verbal, non-verbal, written, and digital communication skills.*
2. *Improve listening, speaking, reading, and writing competencies.*
3. *Build confidence in interpersonal and professional communication.*
4. *Develop presentation, group discussion, interview, and public speaking skills.*
5. *Enhance workplace communication and employability skills.*
6. *Use communication ethically and effectively in diverse professional environments.*

Course Outcomes

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

1. *Demonstrate effective verbal and non-verbal communication in academic and professional settings.*
2. *Apply listening, reading, writing, and presentation skills appropriately.*
3. *Communicate confidently in teams, meetings, interviews, and public speaking situations.*
4. *Prepare professional correspondence and use digital communication tools effectively.*
5. *Exhibit interpersonal skills, workplace etiquette, emotional intelligence, and ethical communication practices.*

UNIT I: FOUNDATIONS OF EFFECTIVE COMMUNICATION AND PERSONAL COMMUNICATION SKILLS:

Communication: Meaning, Definition, Objectives, Scope, Importance, Process, and Characteristics; Elements of communication; Communication cycle; Principles of effective communication (7 Cs of Communication); Types of communication—verbal, non-verbal, written, oral, visual, formal, informal, upward, downward, horizontal, diagonal, and digital communication; Channels of communication; Barriers to communication and strategies for overcoming them.

Listening skills: Importance of listening, hearing versus listening, active listening, empathetic listening, appreciative listening, critical listening, barriers to effective listening, techniques for improving listening.

Speaking skills: pronunciation, articulation, fluency, clarity, voice modulation, vocabulary enhancement, confidence building, overcoming stage fear, extempore speaking, storytelling, persuasive speaking, public speaking, presentation skills, seminar presentation, classroom interaction.

Non-verbal communication: body language, posture, gestures, facial expressions, eye contact, personal appearance, proxemics, paralanguage, time management (chronemics), professional etiquette, cross-cultural communication.

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Interpersonal communication: self-awareness, self-confidence, emotional intelligence, empathy, teamwork, collaboration, conflict resolution, negotiation skills, assertiveness, networking, relationship building, communication in multicultural environments.

UNIT II: PROFESSIONAL, WORKPLACE AND DIGITAL COMMUNICATION SKILLS:

Written communication: Principles of effective writing; Paragraph writing; Note-making; Précis writing; Report writing; Business correspondence; Formal letters; Email writing; Office memoranda; Notices; Agenda and Minutes of meetings; Resume/curriculum vitae preparation; Statement of purpose; Cover letter; Social media communication; Professional messaging etiquette.

Professional communication: Workplace communication, Communication with colleagues, Supervisors, Clients, Customers and Stakeholders; Telephone etiquette; Meeting etiquette; Business meetings; Professional presentations; Interviewing skills; Interview preparation; HR interview; Group interview; Online interview; Networking skills.

Digital communication: Communication through email, Video conferencing, Collaborative platforms, Instant messaging, Social media; Digital etiquette (Netiquette); Online professionalism; Cybersecurity awareness in communication; Responsible use of digital media; AI-assisted communication tools; Ethical use of technology in communication.

Employability communication skills: Customer service communication, Problem-solving Communication, Leadership communication, Persuasive communication, Conflict management, Workplace ethics, Cross-cultural communication, Communication for entrepreneurship, Communication for start-ups, Communication in service industries, Communication for innovation and teamwork.

SUGGESTED READING:

1. Raman, M., & Singh, P. (2023). Business Communication (3rd Edition). Oxford University Press, New Delhi.
2. Lesikar, R. V., Flatley, M. E., & Rentz, K. (2022). Business Communication: Making Connections in a Digital World (14th Edition). McGraw-Hill Education, New York.
3. Murphy, H. A., Hildebrandt, H. W., & Thomas, J. P. (2021). Effective Business Communication (7th Edition). McGraw-Hill Education.
4. Bovee, C. L., & Thill, J. V. (2023). Business Communication Today (15th Edition). Pearson Education.
5. Penrose, J. M., Rasberry, R. W., & Myers, R. J. (2022). Advanced Business Communication (6th Edition). Cengage Learning.
6. Chaturvedi, P. D., & Chaturvedi, M. (2023). Business Communication: Concepts, Cases and Applications. Pearson India.
7. Rai, U., & Rai, S. M. (2022). Business Communication. Himalaya Publishing House, Mumbai.
8. Meenakshi Raman. (2023). Technical Communication: Principles and Practice. Oxford University Press, New Delhi.
9. Pillai, S. (2022). Effective Communication Skills. S. Chand Publishing, New Delhi.

SEC1(a): COMMUNICATION SKILLS

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	3	2	**3**	2	2	2	2	**3**	3

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CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO2	2	3	2	**3**	2	2	2	2	**3**	3
CO3	2	3	2	**3**	2	2	3	3	**3**	3
CO4	2	3	2	**3**	**3**	3	2	3	3	3
CO5	2	3	3	**3**	2	**3**	3	3	**3**	3

SEMESTER V

Paper MDC SEC2 (c) : ENTREPRENEURSHIP AND START-UPS

PAPER CODE: SEC2 (c) **Max. Marks: 40U +10I=50**

THPW: 2; Credits: 2 **ESED: 2 hrs**

Course Objectives

The course aims to enable students to:

1. *Develop an entrepreneurial mindset and innovative thinking.*
2. *Identify and evaluate business opportunities.*
3. *Understand the process of starting and managing a new venture.*
4. *Prepare basic business models and business plans.*
5. *Understand funding sources, government support, and legal requirements for start-ups.*
6. *Appreciate ethical, sustainable, and technology-driven entrepreneurship.*

Course Outcomes

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

1. Explain the concepts, characteristics, and importance of entrepreneurship and start-ups.
2. Identify entrepreneurial opportunities using creativity, innovation, and market analysis.
3. Develop basic business models and prepare simple business plans.
4. Understand funding options, government initiatives, and legal aspects of starting a business.
5. Demonstrate entrepreneurial thinking, problem-solving, and innovation skills applicable to new venture creation.

UNIT I: ENTREPRENEURIAL MINDSET AND VENTURE CREATION:

Entrepreneurship: meaning, nature, characteristics, importance, myths and realities of entrepreneurship; entrepreneurship as a career; role of entrepreneurship in economic development, employment generation, innovation, wealth creation, and social transformation; characteristics and competencies of successful entrepreneurs; entrepreneurial mindset; creativity, innovation, opportunity recognition, problem-solving, risk-taking, resilience, adaptability, leadership, and ethical entrepreneurship.

Types of entrepreneurship: small business entrepreneurship, scalable start-ups, social entrepreneurship, women entrepreneurship, rural entrepreneurship, agripreneurship, green entrepreneurship, digital entrepreneurship, family business entrepreneurship, technology entrepreneurship, intrapreneurship, and student entrepreneurship.

Entrepreneurial process: identifying business opportunities, opportunity assessment, market gaps, customer needs, value proposition, idea generation techniques, brainstorming, design thinking, lean start-up

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approach, feasibility analysis, market research, business model innovation, Business Model Canvas, value chain, competitive advantage, and minimum viable product (MVP).

Entrepreneurial ecosystem: role of universities, incubators, accelerators, mentors, angel investors, venture capitalists, banks, government agencies, industry associations, innovation hubs, and entrepreneurship development institutions.

UNIT II: START-UP MANAGEMENT AND GROWTH:

Business planning: preparing a business plan; executive summary; marketing plan; operations plan; financial projections; risk analysis; growth strategy; business pitching.

Legal aspects of starting a business: choice of business organization; registration procedures; intellectual property rights (patents, trademarks, copyrights); licensing; GST registration (introductory); taxation basics; regulatory compliance; ethics in entrepreneurship.

Financing start-ups: bootstrapping, family financing, bank loans, microfinance, Mudra loans, Stand-Up India, Start-up India, PMEGP, SIDBI support, crowdfunding, angel investment, venture capital, incubator funding, accelerator programmes, grants, and government incentives.

Marketing for start-ups: branding, customer acquisition, digital marketing, social media marketing, e-commerce, online marketplaces, customer relationship management, pricing, sales strategies, and growth hacking.

Managing and scaling start-ups: operations management, human resource management, financial management, networking, partnerships, negotiation, crisis management, business failure, turnaround strategies, exit strategies, mergers and acquisitions (introductory), sustainability, ESG considerations, social entrepreneurship, ethical entrepreneurship, AI in entrepreneurship, Industry 5.0, future entrepreneurial opportunities, and emerging sectors in India.

SUGGESTED READING

1. Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2023). *Entrepreneurship* (12th Edition). McGraw-Hill Education, New York.
2. Kuratko, D. F. (2022). *Entrepreneurship: Theory, Process and Practice* (12th Edition). Cengage Learning, Boston.
3. Barringer, B. R., & Ireland, R. D. (2021). *Entrepreneurship: Successfully Launching New Ventures* (7th Edition). Pearson Education, Harlow.
4. Ries, E. (2017). *The Lean Startup*. Penguin Books, London.
5. Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation*. John Wiley & Sons, Hoboken.
6. Khanka, S. S. (2022). *Entrepreneurial Development*. S. Chand Publishing, New Delhi.
7. Desai, V. (2022). *Dynamics of Entrepreneurial Development and Management*. Himalaya Publishing House, Mumbai.
8. Gupta, C. B., & Srinivasan, N. P. (2023). *Entrepreneurship Development in India*. Sultan Chand & Sons, New Delhi.
9. Raj Shankar. (2023). *Entrepreneurship Development*. Margham Publications, Chennai.

Online Resources

- Startup India: https://www.startupindia.gov.in
- Ministry of Micro, Small and Medium Enterprises (MSME): https://www.msme.gov.in
- Small Industries Development Bank of India (SIDBI): https://www.sidbi.in
- National Skill Development Corporation (NSDC): https://www.nsdcindia.org
- Atal Innovation Mission: https://aim.gov.in

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- Invest India: https://www.investindia.gov.in

SEC1(c): ENTREPRENEURSHIP AND START-UPS

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	2	2	2	**3**	1	3
CO2	3	3	**3**	2	2	2	**3**	**3**	2	3
CO3	3	**3**	**3**	3	2	2	**3**	**3**	2	3
CO4	3	**3**	3	2	2	**3**	**3**	**3**	1	3
CO5	3	**3**	**3**	3	**3**	**3**	**3**	**3**	2	**3**

SEMESTER VI

Paper MJR 601 (a) : MANAGEMENT ACCOUNTING

PAPER CODE: MJR 601 (a) **Max. Marks: 80U +20I=100**

THPW: 5; Credits: 5 **ESED: 3 hrs**

Course Objectives:

The course aims to enable students to:

1. *Understand the nature, scope, objectives, and evolving role of management accounting in managerial decision-making.*
2. *Apply management accounting techniques for planning, control, performance evaluation, and strategic decision-making.*
3. *Analyse financial and operational information using ratio analysis, budgeting, marginal costing, and responsibility accounting.*
4. *Develop proficiency in preparing management reports, budgets, dashboards, and decision-support analyses using spreadsheet applications.*
5. *Appreciate the role of digital technologies, ERP systems, business analytics, sustainability reporting, and ethical practices in contemporary management accounting.*

Course Outcomes:

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

1. *Explain the concepts, objectives, tools, and applications of management accounting in organisational decision-making.*

2. *Analyse financial and operational performance using management accounting techniques and recommend corrective actions.*

3. *Prepare and interpret budgets, management reports, performance measures, and responsibility accounting statements for managerial control.*

4. *Apply marginal costing, cost-volume-profit analysis, relevant costing, and capital investment appraisal techniques to support managerial decisions.*

5. *Use spreadsheet applications and management information systems to prepare decision-support reports, dashboards, and performance analyses aligned with modern business practices.*

UNIT I: INTRODUCTION TO MANAGEMENT ACCOUNTING AND FINANCIAL ANALYSIS:

Meaning, nature, objectives, scope, importance, and evolution of management accounting; relationship between financial accounting, cost accounting, and management accounting; role of management accounting in planning, organising, directing, controlling, and decision-making; management accountant—functions, responsibilities, professional ethics, and competencies. Financial statement analysis and interpretation; comparative statements; common-size statements; trend analysis; ratio analysis—liquidity,

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profitability, efficiency, solvency, leverage, market performance, and cash flow ratios; DuPont analysis; limitations of financial statement analysis; management reporting; management information systems (MIS); key performance indicators (KPIs); business dashboards; introduction to spreadsheet-based financial analysis.

UNIT II: BUDGETING, BUDGETARY CONTROL AND RESPONSIBILITY ACCOUNTING:

Meaning, objectives, advantages, and limitations of budgeting; budgetary control process; preparation of functional budgets including sales, production, materials, labour, overheads, cash, flexible, and master budgets; zero-based budgeting; performance budgeting; rolling budgets; participative budgeting. Budgetary control; variance overview; responsibility accounting; responsibility centres—cost, revenue, profit, and investment centres; decentralisation; transfer pricing (introductory); responsibility reports; management by exception; performance measurement; balanced scorecard; benchmarking; strategic performance measurement.

UNIT III: MARGINAL COSTING AND MANAGERIAL DECISION-MAKING:

Marginal costing—concept, assumptions, advantages, limitations; contribution analysis; profit-volume ratio; break-even analysis; cost-volume-profit (CVP) analysis; margin of safety; operating leverage. Managerial decision-making using marginal costing—make or buy decisions, product mix decisions, limiting factor analysis, discontinuance decisions, pricing decisions, special order decisions, shutdown decisions, acceptance or rejection of export orders, relevant costing, differential costing, opportunity cost, sunk cost, incremental cost, avoidable and unavoidable costs. Decision analysis using spreadsheet applications.

UNIT IV: STANDARD COSTING, PERFORMANCE EVALUATION AND STRATEGIC MANAGEMENT ACCOUNTING:

Standard costing—meaning, objectives, standard setting, standard costs and actual costs; material, labour, overhead, sales and profit variances (conceptual understanding and interpretation); variance analysis for managerial control. Performance evaluation; divisional performance; return on investment (ROI); residual income; economic value added (EVA) (introductory); strategic management accounting; value chain analysis; competitor cost analysis; target costing; life-cycle costing; quality costing; activity-based management (introductory); lean accounting (introductory); sustainability accounting and integrated reporting.

UNIT V: CONTEMPORARY MANAGEMENT ACCOUNTING AND BUSINESS ANALYTICS:

Management accounting in the digital era; enterprise resource planning (ERP); management information systems; cloud accounting; artificial intelligence and machine learning in accounting; robotic process automation; business intelligence; data visualisation; dashboards; predictive analytics; spreadsheet modelling; Microsoft Excel for management accounting; scenario analysis; sensitivity analysis; what-if analysis; sustainability reporting; environmental, social and governance (ESG) reporting; forensic accounting (introductory); ethics in management accounting; role of management accountants in Industry 5.0 and digital enterprises.

SUGGESTED READING:

1. Atrill, P., & McLaney, E. (2024). *Management Accounting for Decision Makers* (11th Edition). Pearson Education, Harlow.
2. Drury, C. (2022). *Management and Cost Accounting* (11th Edition). Cengage Learning EMEA, Andover.
3. Horngren, C. T., Datar, S. M., & Rajan, M. V. (2024). *Cost Accounting: A Managerial Emphasis* (17th Global Edition). Pearson Education.
4. Garrison, R. H., Noreen, E. W., & Brewer, P. C. (2024). *Managerial Accounting* (18th Edition). McGraw-Hill Education.

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5. Hilton, R. W., & Platt, D. E. (2023). *Managerial Accounting: Creating Value in a Dynamic Business Environment* (13th Edition). McGraw-Hill Education.
6. Khan, M. Y., & Jain, P. K. (2024). *Management Accounting*. McGraw-Hill Education (India), New Delhi.
7. Maheshwari, S. N., Maheshwari, S. K., & Maheshwari, S. K. (2023). *Management Accounting*. Vikas Publishing House, New Delhi.
8. Arora, M. N. (2023). *Cost and Management Accounting*. Himalaya Publishing House, Mumbai.
9. Jain, S. P., & Narang, K. L. (2023). *Cost and Management Accounting*. Kalyani Publishers, Ludhiana.
10. Saxena, V. K., & Vashist, C. D. (2023). *Advanced Cost and Management Accounting*. Sultan Chand & Sons, New Delhi.

Professional References:

1. Institute of Cost Accountants of India. Study Material on Cost and Management Accounting.
2. Chartered Institute of Management Accountants. Professional Management Accounting Resources.
3. International Federation of Accountants. Guidance on Management Accounting and Sustainability Reporting.

MJR 601(a): MANAGEMENT ACCOUNTING

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	2	2	3	3	1	3
CO2	3	3	3	3	2	2	3	3	2	3
CO3	3	3	3	3	3	2	3	3	2	3
CO4	3	3	3	3	3	2	3	3	1	3
CO5	3	3	3	3	3	3	3	3	2	3

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SEMESTER VI

MJR 601 (b) : E-COMMERCE

PAPER CODE: MJR 601 (b) **Max. Marks: 80+20=100**
THPW: 5; Credits: 5 **ESED: 2 hrs**

Objective: *to acquire conceptual and application knowledge of ecommerce.*

Course Objectives
The course aims to enable students to:

1. *Understand the concepts, models and applications of e-commerce and e-business.*
2. *Develop knowledge of e-commerce technologies, security and digital payment systems.*
3. *Apply e-commerce tools and electronic data interchange in business operations.*
4. *Understand e-marketing techniques and digital business strategies.*
5. *Develop practical skills in designing basic web pages for e-commerce applications.*

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

1. *Explain the concepts, models and applications of e-commerce and e-business.*
2. *Apply e-commerce technologies, security measures and digital payment systems.*
3. *Use electronic data interchange and e-commerce tools in business transactions.*
4. *Evaluate e-marketing techniques and digital business strategies.*
5. *Design basic web pages for e-commerce applications using web development tools.*

UNIT-I: INTRODUCTION:

E-Commerce: Meaning - Advantages & Limitations - E-Business: Traditional & Contemporary Model, Impact of E-Commerce on Business Models - Classification of E-Commerce: B2B - B2C - C2B - C2C - B2E - Applications of Ecommerce: E-Commerce Organization Applications - E-Marketing - E-Advertising - E-Banking - Mobile Commerce - E-Trading - E-Learning - E-Shopping.

UNIT-II: FRAMEWORK OF E-COMMERCE:

Framework of E-Commerce: Application Services - Interface Layers - Secure Messaging - Middleware Services and Network Infrastructure - Site Security - Firewalls & Network Security - TCP/IP – HTTP - Secured HTTP – SMTP - SSL.
Data Encryption: Cryptography – Encryption – Decryption - Public Key - Private Key - Digital Signatures - Digital Certificates.

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UNIT-III: CONSUMER ORIENTED E-COMMERCE APPLICATIONS:

Introduction - Mercantile Process Model: Consumers Perspective and Merchant's Perspective - Electronic Payment Systems: Legal Issues & Digital Currency - E-Cash & E-Cheque - Electronic Fund Transfer (EFT) - Advantages and Risks - Digital Token-Based E-Payment System - Smart Cards.

UNIT-IV: ELECTRONIC DATA INTERCHANGE:

Introduction - EDI Standards - Types of EDI - EDI Applications in Business – Legal - Security and Privacy issues if EDI - EDI and E-Commerce - EDI Software Implementation.

UNIT-V: E-MARKETING TECHNIQUES:

Introduction - New Age of Information - Based Marketing - Influence on Marketing - Search Engines & Directory Services - Charting the On-Line Marketing Process - Chain Letters - Applications of 5P's (Product, Price, Place, Promotion, People) E-Advertisement - Virtual Reality & Consumer Experience - Role of Digital Marketing.

Lab work: *Using Microsoft Front Page Editor and HTML in Designing a Static Webpage/Website.*

SUGGESTED READINGS:

1. **Kalakota, Ravi and Whinston, Andrew B., 1996,** *Frontiers of Electronic Commerce*, Pearson Education, New Delhi.
2. **Joseph, P.T., S.J., 2023,** *E-Commerce: An Indian Perspective*, **7th Edition**, PHI Learning, New Delhi.
3. **Bhasker, Bharat, 2006,** *Electronic Commerce: Framework, Technologies and Applications*, Tata McGraw-Hill Publishing Company, New Delhi.
4. **Rayport, Jeffrey F. and Jaworski, Bernard J.,** *Introduction to E-Commerce*, Tata McGraw-Hill Publishing Company, New Delhi, **Latest Available Edition**.
5. **Kalakota, Ravi and Robinson, Marcia, 2001,** *E-Business 2.0: Roadmap for Success*, **2nd Edition**, Addison-Wesley, Boston.
6. **Kalakota, Ravi and Whinston, Andrew B.,** *Electronic Commerce: A Manager's Guide*, Addison-Wesley, Reading, Massachusetts, **Latest Available Edition**.
7. **Singh, Rajinder and Rasheed, Er. Kaisar,** *E-Commerce & Computerized Accounting*, Kalyani Publishers, New Delhi, **Latest Available Edition**.
8. **Pandey, Saurabh Shukla,** *E-Commerce & Mobile Commerce Technologies*, S. Chand Publishing, New Delhi, **Latest Available Edition**.
9. **Loshin, Pete and Vacca, John,** *Electronic Commerce*, Firewall Media, New Delhi, **Latest Available Edition**.
10. **Whiteley, David,** *E-Commerce: Strategy, Technologies and Applications*, Tata McGraw-Hill Publishing Company, New Delhi, **Latest Available Edition**.
11. **Kandula, Tulasi Ram,** *E-Commerce*, Himalaya Publishing House, Mumbai, **Latest Available Edition**.

MJR 601(b): E-COMMERCE

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	**3**	1	2	**3**	1	3

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CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO2	3	3	**3**	2	**3**	**3**	**3**	**3**	1	3
CO3	3	**3**	**3**	2	**3**	2	**3**	**3**	2	3
CO4	3	**3**	**3**	**3**	**3**	2	**3**	**3**	2	**3**
CO5	3	**3**	**3**	2	**3**	2	2	**3**	2	**3**

SEMESTER VI

MJR 601 (c) : MULTIMEDIA SYSTEMS

PAPER CODE: MJR 601 (c) **Max. Marks: 80+20=100**
THPW: 5; Credits: 5 **ESED: 2 hrs**

Objective: *To acquire the knowledge of multimedia systems.*

Course Objectives

The course aims to enable students to:

1. *Understand the concepts and components of multimedia systems.*
2. *Develop knowledge of digital media, animation and multimedia communication.*
3. *Apply multimedia standards, storage technologies and data compression techniques.*
4. *Understand multimedia databases, synchronization and communication systems.*
5. *Explore the applications of multimedia in communication, entertainment and business.*

Course Outcomes

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

1. *Explain the concepts and technologies of multimedia systems.*
2. *Apply multimedia techniques for digital image, video and animation processing.*
3. *Evaluate multimedia compression standards and storage technologies.*
4. *Analyse multimedia communication systems, databases and synchronization techniques.*
5. *Apply multimedia technologies in communication, business and entertainment applications.*

UNIT-I: MEDIA AND DATA STREAMS:

Properties of multimedia systems, Data streams characteristics: Digital representation of audio, numeric instruments digital interface Bark concepts, Devices, Messages, Timing Standards Speech generation, analysis and transmission.

UNIT-II: DIGITAL IMAGE & ANIMATIONS:

Digital Image: Analysis, recognition, transmission, **Video**: Representation, Digitalization, transmission.
Animations: Basic concepts, animation languages, animations control transmission.

UNIT-III: DATA COMPRESSION STANDARDS &STORAGE:

Data Compression Standards: JPEG, H-261, MPEG DVI
Optical storage devices and Standards: WORHS, CDDA, CDROM, CDWO, CDMO.

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Real Time Multimedia, Multimedia file System.

UNIT-IV: MULTIMEDIA COMMUNICATION SYSTEM, DATABASES & SYNCHRONIZATION:

Multimedia Communication System: Collaborative computing session management, transport subsystem, QOS, resource management.
Multimedia Databases: Characteristics, data structures, operation, integration in a database model.
Synchronization: Issues, presentation requirements, reference to multimedia synchronization, MHEG.

UNIT-V: MULTIMEDIA APPLICATION:

Media preparation, Composition, integration communication, consumption, entertainment.

SUGGESTED READINGS:

1. **Steinmetz, Ralf and Nahrstedt, Klara, 1995,** *Multimedia: Computing, Communications and Applications*, Prentice Hall PTR, Innovative Technology Series.
2. **Buford, John F. Koegel, 1994,** *Multimedia Systems*, Addison-Wesley, Reading, Massachusetts.
3. **Elsom-Cook, Mark, 2001,** *Principles of Interactive Multimedia*, McGraw-Hill, London.
   Jeffcoate, Judith, 1995, *Multimedia in Practice: Technology and Applications*, Prentice Hall, New York.

MJR 601(c): MULTIMEDIA SYSTEMS

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	**3**	**3**	1	1	2	1	3
CO2	3	**3**	**3**	**3**	**3**	1	1	**3**	2	**3**
CO3	3	**3**	**3**	2	**3**	1	1	2	1	**3**
CO4	3	**3**	**3**	**3**	**3**	2	1	2	2	**3**
CO5	3	**3**	**3**	**3**	**3**	2	2	**3**	**3**	**3**

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SEMESTER VI

MJR 602(a) : THEORY AND PRACTICE OF GST

PAPER CODE: MJR 602 (a) **Max. Marks: 50T+ 35P+ 15I=100**
THPW: 3T+4P; Credits: 5 **ESED: 2 hrs**

Objective: *to equip the students with the knowledge regarding Theory and Practice of GST.*

Course Objectives

The course aims to enable students to:

1. *Understand the concepts, procedures and compliance requirements of Goods and Services Tax (GST).*
2. *Develop skills in recording GST transactions using ERP software.*
3. *Apply GST provisions relating to goods, services and input tax credit.*
4. *Prepare GST returns and perform GST compliance using ERP.*
5. *Understand GST reporting and ERP integration for effective tax management.*

Course Outcomes

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

1. *Explain the concepts and compliance requirements under GST.*
2. *Record GST transactions for goods and services using ERP software.*
3. *Apply GST provisions relating to input tax credit, tax payment and return filing.*
4. *Prepare and file GST returns using ERP and the GST portal.*
5. *Use ERP tools to generate GST reports and ensure effective tax compliance.*

UNIT I: INTRODUCTION TO GST:

Introduction – GST - Taxes Subsumed under GST -Determination of Tax - Registration -Process of Registration - Cancellation and renovation of registration - Supply of Goods and Services - Transition to GST - Registered Business -Availed Input Tax Credit -Unavailed CENVAT credit and Input VAT on capital goods-Availing the input credit held in closing stock -Invoicing -Tax Invoice -Bill of Supply -Credit Note, Debit Note and Supplementary Invoice-Transportation of goods without issue of Invoice -Input Credit Mechanism - Input Tax - GST Returns - Payment of Tax.

UNIT II: GETTING STARTED WITH GST:

Introduction - Enabling GST and Defining Tax Details-Transferring Input Tax credit to GST -Intrastate Supply of Goods-Intrastate Inward Supply -Intrastate Outward Supply -Interstate -Interstate Outward

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Supply - Return of Goods -Purchase Returns -Sales Returns -Supplies Inclusive of Tax -Defining Tax Rates at Master and Transaction Levels - Defining GST Rates at Stock Group Level-Defining GST Rate at Transaction Level -Hierarchy of Applying Tax Rate Details –Reports.

UNIT III: RECORDING ADVANCED ENTRIES, GST ADJUSTMENT AND RETURN FILING:

Introduction -Accounting of GST Transactions -Purchases from Composition Dealer -Purchases from Unregistered Dealers-Exports -Imports -Exempted Goods -SEZ Sales -Advance Receipts and payments - Mixed Supply and Composite Supply under GST -Mixed Supply of Goods -Composite Supply of Goods - GST Reports - Generating GSTR- Report in ERP -Input Tax Credit Set Off -GST Tax Payment -Time line for payment of GST tax -Modes of Payment -Challan Reconciliation -Exporting GSTR- return and uploading in GST portal.

UNIT IV: GETTING STARTED WITH GST (SERVICES):

Introduction -Determination of supply of services -Determining the Place of Supply of Services -Enabling GST and Defining Tax Details-Transferring Input Tax credit to GST -Intrastate Supply of Goods -Intrastate Inward Supply-Intrastate Outward Supply -Interstate Supply -Interstate Outward Supply -Interstate Inward Supply -Interstate Outward Supply of Services -Cancellation of Services -Cancellation of Inward Supplies -Cancellation of Outward Supply of Services -Defining Tax Rates at Master and Transaction Levels.

UNIT V: RECORDING ADVANCED ENTRIES AND MIGRATION TO ERP:

Introduction - Accounting Multiple Services in a Single Supply - Recording Partial Payment to Suppliers - Outward Supplies - Recording Outward Supply with Additional Expenses - Supply of services -Business to consumers - Time of Supply of Services - Place of Supply of Services - Determining place of supply of services - Exempt Supply of Services under GST -Export Supply of Services - Reverse Charge on Services under GST - Advance Receipts from Customers under GST - Advance Receipt and issuing Invoice on same month -Advance Receipt and issuing Invoice on different month - Reversal of GST on account of cancellation of advance receipt - Generating GSTR- Report in ERP - Input Tax Credit Set Off - Migration to ERP - Activate Goods and Services Tax (GST) in ERP - Set up GST rates - Update Masters - Update party GSTIN/UIN - Creation of GST Duty ledgers.

SUGGESTED READINGS:

1. **Taxmann Editorial Board, Latest Edition,** *Taxmann's Basics of GST*, Taxmann Publications, New Delhi.
2. **Taxmann Editorial Board, Latest Edition,** *Taxmann's GST: A Practical Approach*, Taxmann Publications, New Delhi.
3. **Srivathsala, Latest Edition,** *Theory and Practice of GST*, Himalaya Publishing House, Mumbai.
4. **Ravi, M.N., Latest Edition,** *Theory and Practice of GST*, PBP Publications, New Delhi.
5. **Sudhakar, A., Bhavani, O. and Moses, N., Latest Edition,** *Theory and Practice of GST*, National Publishing Company, New Delhi.
6. **Government of India, Ministry of Finance, Latest Applicable Version,** *Central Goods and Services Tax Act, 2017; Integrated Goods and Services Tax Act, 2017; Central Goods and Services Tax Rules, 2017, and Relevant Notifications and Circulars*, Government of India, New Delhi.

MJR 602(a): THEORY AND PRACTICE OF GST

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	2	2	3	3	2	1	3
CO2	3	3	3	2	**3**	3	3	2	2	3
CO3	3	3	3	2	**3**	3	3	3	2	3
CO4	3	3	3	3	**3**	3	3	3	2	3

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CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO5	3	3	3	3	**3**	3	3	3	2	3

SEMESTER VI

MJR 602 (b): INTERNATIONAL AUDITING

PAPER CODE: MJR 602 (b) **Max. Marks: 80U +20I=100**
THPW: 5; Credits: 5 **ESED: 3 hrs**

Objective: *To make students to understand the International Auditing.*

Course Objectives

The course aims to enable students to:

1. *Understand the principles, standards and ethics of auditing.*
2. *Develop knowledge of audit planning, risk assessment and internal controls.*
3. *Apply audit procedures to obtain and evaluate audit evidence.*
4. *Understand the preparation and interpretation of audit reports.*
5. *Familiarise students with review, attestation and governmental audit engagements.*

Course Outcomes

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

1. *Explain the principles, standards and ethical requirements of auditing.*
2. *Assess audit risks and plan audit procedures for effective assurance.*
3. *Apply audit techniques to gather and evaluate audit evidence.*
4. *Prepare and interpret audit reports for different types of audit engagements.*
5. *Evaluate review, attestation and governmental auditing practices.*

UNIT I: ETHICS, PROFESSIONAL RESPONSIBILITIES AND GENERAL AUDITING PRINCIPLES:

Introduction to Auditing: Generally Accepted Auditing Standards (GAAS) - International Standards of Auditing (ISA) - Ethics, independence and professional conduct: AICPA Code of Professional Conduct - Sarbanes-Oxley Act (SOX), 2002 - Public Company Accounting Oversights Board (PCAOB) - Securities & Exchange Commission (SEC) - International Standards - Engagement Understanding and Acceptance: Pre-Engagement Acceptance Activities - Engagement Letter - Auditor's communication with those charged with governance

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Quality Control: Statements on Quality Control Standards (SQCS) - Elements of a System of Quality control

UNIT II: ASSESSING AUDIT RISK AND DEVELOPING A PLANNED RESPONSE:

Audit Risk: Inherent Risk - Control Risk - Detection Risk - Fraud Risk: Fraudulent financial reporting - Misappropriation of assets - Fraud risk factors - Auditor's consideration of fraud

Planning the Audit: Audit Strategy - Audit Plan - Internal Controls: Auditor's Consideration of Internal Control - Operating Cycles - Internal Control Reports and Communications

UNIT III: PERFORMING FURTHER PROCEDURES AND OBTAINING AUDIT EVIDENCE:

Audit Evidence: Management's Assertions - Sufficient & Appropriate Audit Evidence - Audit Evidence determined by Risk of Material Misstatement (RMM) - Substantive Procedures: Revenue cycle - Expenditure cycle - Production cycle - Payroll cycle - Investing cycle - Financing cycle - Opening Balances - Illegal Acts - Related Parties - Contingencies - Estimates & Fair Value Measurements - Subsequent Events - Omitted Procedures & Subsequent Discovery of Facts - Using the Work of Others - Evaluating Audit Findings - Audit Documentation - Management Representation Letter - Audit Sampling: Sampling Risks - Attributes Sampling - Classical Variables Sampling - Probability Proportional to Size (PPS) Sampling

UNIT IV: AUDIT REPORTING:

Audit Reports: Unmodified opinion - Unmodified Opinion with Emphasis-of-matter and/or Other-matter paragraph - Qualified Opinion - Adverse Opinion - Disclaimer of Opinion - Audit Reporting Considerations: Audit of Comparative financial statements - Supplementary Information - Audit of Group financial statements - Audit of Single financial statements & Specific financial statement elements, accounts or items - Audit of Special Purpose financial statements - Audit of financial statements prepared using financial reporting framework of another country

UNIT V: OTHER ENGAGEMENTS:

Accounting & Review Services: Preparation of financial statements - Compilation engagement - Review engagement - Attestation Engagements: Examination - Review - Agreed-upon Procedures - Governmental Auditing: Governmental Auditing Standards - Single Audit Act

SUGGESTED READINGS:

1. Miles CPA Review Concept Book: Auditing and Attestation, Miles Education
2. Wiley CPA Excel Exam Review Course Study Guide: Auditing and Attestation, Wiley
3. Wiley Practitioner's Guide to GAAS: Covering all SAS, SSAE's , SSARS, PCAOB, Auditing Standards, and Interpretations, Joanne M. Flood, Wiley
4. Auditing: A Risk Based-Approach to Conducting a Quality Audit, Karla M Johnstone, Audrey A. Gramling and Larry E. Rittenberg, Cengage Learning
5. Principles of Auditing & Other Assurance Services, Ray Whittington and Kurt Pany, McGraw Hill
6. Auditing & Assurance Services: A Systematic Approach, William F Messier Jr, Steven M. Glover and Douglas F. Prawitt, McGraw Hill.

MJR 602(b): INTERNATIONAL AUDITING

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	3	2	**3**	3	2	2	**3**

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CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO2	3	3	**3**	2	2	3	**3**	2	2	3
CO3	3	3	**3**	2	**3**	3	**3**	2	2	**3**
CO4	3	3	**3**	**3**	**3**	3	**3**	2	2	**3**
CO5	3	3	**3**	**3**	2	**3**	3	2	**3**	**3**

SEMESTER VI

MJR 602(c): DATA ANALYTICS

PAPER CODE: MJR 602 (a) **Max. Marks: 50T+ 35P+ 15I=100**
THPW: 3T+4P; Credits: 5 **ESED: 2 hrs**

Objective: *To l*earn the different ways of data Analysis, data streams, mining and clustering and visualization.

Course Objectives:
The course aims to enable students to:

1. *Understand the principles, standards and ethics of auditing.*
2. *Develop knowledge of audit planning, risk assessment and internal controls.*
3. *Apply audit procedures to obtain and evaluate audit evidence.*
4. *Understand the preparation and interpretation of audit reports.*
5. *Familiarise students with review, attestation and governmental audit engagements.*

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

1. *Explain the principles, standards and ethical requirements of auditing.*
2. *Assess audit risks and plan audit procedures for effective assurance.*
3. *Apply audit techniques to gather and evaluate audit evidence.*
4. *Prepare and interpret audit reports for different types of audit engagements.*
5. *Evaluate review, attestation and governmental auditing practices.*

UNIT-I: INTRODUCTION TO BIG DATA:

Introduction to Big Data Platform – Challenges of conventional systems – Web data – Evolution of Analytic scalability, analytic processes and tools, Analysis vs reporting – Modern data analytic tools, Stastical concepts: Sampling distributions, resampling, statistical inference, prediction error.

UNIT-II: DATA ANALYSIS:

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Regression modeling, Multivariate analysis, Bayesian modeling, inference and Bayesian networks, Support vector and kernel methods, Analysis of time series: linear systems analysis, nonlinear dynamics – Rule induction – Neural networks: learning and generalization, competitive learning, principal component analysis and neural networks; Fuzzy logic: extracting fuzzy models from data, fuzzy decision trees, Stochastic search methods.

UNIT-III: MINING DATA STREAMS:

Introduction to Streams Concepts – Stream data model and architecture – Stream Computing, Sampling data in a stream – Filtering streams – Counting distinct elements in a stream – Estimating moments – Counting oneness in a window – Decaying window – Realtime Analytics Platform(RTAP) applications – case studies – real time sentiment analysis, stock market predictions.

UNIT-IV: FREQUENT ITEMSETS AND CLUSTERING:

Mining Frequent item sets – Market based model – Apriori Algorithm – Handling large data sets in Main memory – Limited Pass algorithm – Counting frequent itemsets in a stream – Clustering Techniques – Hierarchical – K- Means – Clustering high dimensional data – CLIQUE and PROCLUS – Frequent pattern based clustering methods – Clustering in non-euclidean space – Clustering for streams and Parallelism.

UNIT-V: FRAMEWORKS AND VISUALIZATION:

MapReduce – Hadoop, Hive, MapR – Sharding – NoSQL Databases – S3 – Hadoop Distributed file systems – Visualizations – Visual data analysis techniques, interaction techniques; Systems and applications:

SUGGESTED READINGS:

1. **Berthold, Michael R. and Hand, David J., 2003,** *Intelligent Data Analysis: An Introduction*, 2nd Edition, Springer-Verlag, Berlin and Heidelberg.
2. **Leskovec, Jure, Rajaraman, Anand and Ullman, Jeffrey D., 2020,** *Mining of Massive Datasets*, 3rd Edition, Cambridge University Press, Cambridge.
3. **Franks, Bill, 2012,** *Taming the Big Data Tidal Wave: Finding Opportunities in Huge Data Streams with Advanced Analytics*, Wiley, Hoboken, New Jersey.
4. **Myatt, Glenn J., 2007,** *Making Sense of Data: A Practical Guide to Exploratory Data Analysis and Data Mining*, Wiley-Interscience, Hoboken, New Jersey.
5. **Warden, Pete, 2011,** *Big Data Glossary*, O'Reilly Media, Sebastopol, California.
6. **Han, Jiawei, Pei, Jian and Tong, Hanghang, 2022,** *Data Mining: Concepts and Techniques*, 4th Edition, Morgan Kaufmann/Elsevier, Cambridge, Massachusetts.

MJR 602(c): Data Analytics COs

CO–PO Mapping

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	**3**	1	2	2	1	**3**
CO2	3	**3**	**3**	2	**3**	2	**3**	2	1	**3**
CO3	3	**3**	**3**	2	**3**	2	**3**	**3**	2	**3**
CO4	3	**3**	**3**	2	**3**	2	**3**	**3**	2	**3**
CO5	3	**3**	**3**	**3**	**3**	2	**3**	**3**	**3**	**3**

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SEMESTER VI

RMP 603 : RESEARCH METHODOLOGY AND PROJECT REPORT WRITING

PAPER CODE: RMP 603 **Max. Marks: 40U +10I+25PR+15IS+10VV=100**
THPW: 2T+4PR; Credits: 4 **ESED: 2 hrs**

Course Objectives:
The course aims to enable students to:

1. *Understand the concepts, principles, methods, ethics and process of scientific and business research.*
2. *Develop the ability to identify research problems, formulate objectives, research questions and hypotheses, and design appropriate research studies.*
3. *Design research instruments, select suitable sampling techniques, and collect reliable primary and secondary data.*
4. *Apply appropriate statistical tools using technology for analysing and interpreting research data.*
5. *Prepare professional project reports, internship reports and research presentations following accepted academic standards and ethical practices.*
6. *Develop analytical, critical thinking, problem-solving and research skills required for higher education, corporate careers and entrepreneurship.*

Course Outcomes:
On successful completion of the course, students will be able to:

1. *Explain the concepts, methods, types and process of research and formulate meaningful research problems.*
2. *Design research studies using appropriate objectives, hypotheses, research designs, sampling methods and data collection instruments.*
3. *Analyse qualitative and quantitative data using suitable statistical techniques and software tools.*
4. *Interpret research findings, draw conclusions and make evidence-based recommendations.*
5. *Prepare and present project reports, internship reports and research papers following accepted academic and ethical standards.*

UNIT I: RESEARCH METHODOLOGY AND RESEARCH DESIGN:

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Introduction to Research: Meaning, objectives, scope, significance, characteristics, scientific method, business and social science research, ethics in research, plagiarism, research integrity, responsible use of Artificial Intelligence (AI) in research, and research misconduct.
Types of Research: Basic, Applied, Exploratory, Descriptive, Analytical, Experimental, Qualitative, Quantitative, Mixed Methods, Conceptual, Empirical, Survey, Case Study, Historical, Action and Evaluation Research.
Research Process: Identification of research problem, research gap, literature review, variables, problem statement, objectives, research questions, hypotheses, scope, limitations and assumptions. Research Design: Meaning, importance and types of research design.
Measurement and Sampling: Measurement scales, scaling techniques, questionnaire design, reliability, validity, pilot study, primary and secondary data, sampling methods, sample size determination and data collection techniques.

UNIT II: DATA ANALYSIS, INTERPRETATION AND PROJECT REPORT WRITING:

Data Preparation: Editing, coding, classification, tabulation, data cleaning and validation. Data Analysis and Interpretation: Descriptive and inferential statistical techniques; selection of appropriate statistical tools; interpretation of statistical output; drawing conclusions and managerial implications. Project Report Writing: Structure of a project report, internship report and research paper; referencing and citation styles; plagiarism checking; AI-assisted academic writing; seminar presentation, poster presentation and viva voce.
Research Ethics: Ethical practices, responsible use of AI, data integrity, avoidance of plagiarism, fabrication, falsification and other forms of research misconduct.

Note: The emphasis of this course is on the **selection, application and interpretation** of appropriate statistical techniques rather than manual computation. Students are expected to analyse data using **Microsoft Excel** and may also be introduced to software packages such as **SPSS, PSPP, Jamovi, R, or other equivalent statistical tools**, depending on institutional facilities. The objective is to enable students to interpret statistical results and make evidence-based business decisions rather than perform lengthy manual calculations.

SUGGESTED READING

Core Textbooks

1. Cooper, D. R., Schindler, P. S., & Sharma, J. K. (2023). *Business Research Methods* (13th Global Edition). McGraw-Hill Education, New Delhi.
2. Creswell, J. W., & Creswell, J. D. (2023). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (6th Edition). Sage Publications, Thousand Oaks.
3. Kothari, C. R., & Garg, G. (2023). *Research Methodology: Methods and Techniques* (4th Revised Edition). New Age International Publishers, New Delhi.
4. Malhotra, N. K., Nunan, D., & Birks, D. F. (Latest Edition). *Marketing Research: An Applied Approach*. Pearson Education.
5. Saunders, M., Lewis, P., & Thornhill, A. (2023). *Research Methods for Business Students* (9th Edition). Pearson Education, Harlow.
6. Sekaran, U., & Bougie, R. (2021). *Research Methods for Business: A Skill Building Approach* (8th Edition). John Wiley & Sons, Chichester.
7. Gupta, C. B., & Gupta, V. (2022). *Business Research Methods*. Sultan Chand & Sons, New Delhi.
8. Raju, P. S. N. (Latest Edition). *Research Methodology*. Himalaya Publishing House, Mumbai.

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Business Statistics and Data Analysis

9. Gupta, S. P. (2023). *Statistical Methods*. Sultan Chand & Sons, New Delhi.
10. Sharma, J. K. (2022). *Business Statistics*. Pearson India, New Delhi.

Academic Writing, Research Ethics and Citation

11. American Psychological Association. (2020). *Publication Manual of the American Psychological Association* (7th Edition). American Psychological Association, Washington, D.C.
12. University Grants Commission (UGC). *Guidelines on Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions* (Latest Guidelines).

Software Documentation and Digital Resources

13. Microsoft Corporation. *Microsoft Excel Documentation and Training Resources* (Latest Version).
14. IBM Corporation. *IBM SPSS Statistics Documentation* (Latest Version).
15. Jamovi Project. *Jamovi User Guide* (Latest Version).
16. National Digital Library of India (NDLI), SWAYAM, NPTEL, and other recognised online learning resources relating to Research Methodology, Business Statistics, Data Analysis, Academic Writing, and Research Ethics.

RMP 603: RESEARCH METHODOLOGY AND PROJECT REPORT WRITING

CO–PO Mapping

Given the nature of this paper, the strongest alignment is with **PO2, PO3, PO4, PO5, PO6 and PO10**. In particular, **CO2–CO4** directly develop research design, analytical and evidence-based decision-making competencies, while **CO3** explicitly supports digital/statistical competence.

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	**3**	**3**	2	2	**3**	2	2	1	**3**
CO2	3	**3**	**3**	2	2	**3**	**3**	3	2	**3**
CO3	3	**3**	**3**	2	**3**	2	**3**	2	2	**3**
CO4	3	**3**	**3**	**3**	**3**	2	**3**	**3**	2	**3**
CO5	3	**3**	3	**3**	**3**	**3**	2	3	**3**	**3**

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SEMESTER VI

SEC 4 (a) : COMPUTERIZED ACCOUNTING

PAPER CODE: SEC4 (a) **Max. Marks: 40U +10I=50**
THPW: 2; Credits: 2 **ESED: 2 hrs**

Objective: *To make the students to acquire the knowledge of computer software*

Course Objectives:
The course aims to enable students to:

1. *Understand the fundamentals and applications of ERP in accounting.*
2. *Develop skills in maintaining accounting and inventory records using ERP.*
3. *Apply ERP for recording business transactions and managing receivables and payables.*
4. *Prepare financial statements and MIS reports using ERP software.*
5. *Use ERP tools to improve accounting efficiency and business decision-making.*

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

1. *Create and maintain accounting and inventory masters in ERP.*
2. *Record and process day-to-day business transactions using ERP.*
3. *Manage accounts receivable, accounts payable and inventory efficiently.*
4. *Prepare financial statements and MIS reports using ERP software.*
5. *Apply ERP systems to support effective accounting and managerial decision-making.*

UNIT I: MAINTAINING CHART OF ACCOUNTS IN ERP:

Introduction-Getting Started with ERP - Mouse/Keyboard Conventions-Company Creation-Shut a Company-Select a Company-Alter Company Details-Company Features and Configurations-F11: Company Features-F12: Configuration-Chart of Accounts-Ledger-Group-Ledger Creation-Single Ledger Creation-Multi Ledger Creation-Altering and Displaying Ledgers-Group Creation-Single Group Creation-Multiple Group Creation-Displaying Groups and Ledgers-Displaying Groups-Display of Ledgers-Deletion of Groups and Ledgers – P2P procure to page.

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UNIT II: MAINTAINING STOCK KEEPING UNITS (SKU):

Introduction-Inventory Masters in ERP - Creating Inventory Masters-Creation of Stock Group-Creation of Units of Measure-Creation of Stock Item-Creation of Godown-Defining of Stock Opening Balance in ERP Stock Category-Reports.

UNIT III: RECORDING DAY-TO-DAY TRANSACTIONS IN ERP:

Introduction-Business Transactions-Source Document for Voucher-Recording Transactions in ERP - Accounting Vouchers-Receipt Voucher (F6)-Contra Voucher (F4)-Payment Voucher (F5)-Purchase Voucher (F9)-Sales Voucher (F8)-Debit Note Voucher-Credit Note (Ctrl+F8)-Journal Voucher (F7).

UNIT IV: ACCOUNTS RECEIVABLE AND PAYABLE MANAGEMENT:

Introduction-Accounts Payables and Receivables-Maintaining Bill-wise Details-Activation of Maintain Bill-wise Details Feature-New Reference-Against Reference-Advance-On Account-Stock Category Report-Changing the Financial Year in ERP.

UNIT V: MIS REPORTS:

Introduction-Advantages of Management Information Systems-MIS Reports in ERP - Trial Balance - Balance Sheet-Profit and Loss Account-Cash Flow Statement-Ratio Analysis-Books and Reports - Day Book-Receipts and Payments-Purchase Register-Sales Register-Bills Receivable and Bills Payable.

SUGGESTED READINGS:

1. **Agarwal, Garima,** *Computerised Accounting*, Himalaya Publishing House, Mumbai, **Latest Edition**.
2. **Krishna, A. Murali,** *Computerised Accounting*, Vaagdevi Publications, **Latest Edition**.
3. **Yogeshweran, G.,** *Computerised Accounting*, PBP Publications, **Latest Edition**.
4. **Spoken Tutorial Project, IIT Bombay, 2013,** *Aakash: Business Tools*, Indian Institute of Technology Bombay, Mumbai.
5. **Maidasani, Dinesh, 2010,** *Mastering Tally*, Firewall Media, Mumbai.
6. **Nadhani, A.K. and Nadhani, K.K., 2010,** *Implementing Tally ERP 9*, BPB Publications, New Delhi.
7. **Kalyani Publishers,** *Computerised Accounting and Business Systems*, Kalyani Publishers, New Delhi, **Latest Edition**.
8. **Arora,** *Tally ERP 9*, Kalyani Publishers, New Delhi, **Latest Edition**.
9. **Accounting Software Developers,** *User Manuals of Relevant Accounting Packages*, **Latest Applicable Version**.

SEC 4(a): COMPUTERISED ACCOUNTING

CO–PO Mapping

For this SEC, the mapping should strongly reflect its **practical ERP orientation**, with the highest contribution to **PO5 – Digital & Technological Competence**, along with PO2, PO3 and PO7.

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	1	**3**	2	2	2	1	3
CO2	3	3	**3**	2	**3**	2	3	2	2	3

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CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO3	3	3	**3**	2	**3**	2	3	2	2	3
CO4	3	3	**3**	3	**3**	2	**3**	3	2	3
CO5	3	3	**3**	3	**3**	3	**3**	**3**	2	**3**

SEMESTER VI

SEC 4 (b) : E-FILING OF TAX RETURNS AND DIGITAL TAX COMPLIANCE

PAPER CODE: SEC4 (a) **Max. Marks: 40U +10I=50**

THPW: 2; Credits: 2 **ESED: 2 hrs**

Course Objectives:

The course aims to enable students to:

1. *Understand the structure of India's digital income tax administration under the Income-tax Act, 2025.*
2. *Develop competency in preparing and electronically filing Income Tax Returns for salaried individuals and other basic taxpayers.*
3. *Use the Income Tax e-Filing Portal confidently for taxpayer services and compliance.*
4. *Understand tax planning, deductions, tax credits, refunds, and digital verification procedures.*
5. *Develop professional, ethical, and technology-enabled tax compliance skills suitable for employment and self-employment.*

Course Outcomes:

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

***1.** Explain the basic provisions of the Income-tax Act, 2025 relevant to individual taxpayers and digital compliance.*

***2.** Compute taxable income under simple situations and determine tax liability under the applicable tax regime.*

***3.** Use the Income Tax Department e-Filing Portal to prepare, validate, file and electronically verify Income Tax Returns.*

***4.** Retrieve and interpret taxpayer information such as AIS, TIS, tax credits, salary information and refund status.*

***5.** Independently file their own Income Tax Returns after entering employment and assist individual taxpayers with routine tax compliance.*

UNIT I: FUNDAMENTALS OF DIGITAL TAXATION AND TAX RETURN PREPARATION:

Introduction to taxation; objectives and importance of taxation; direct and indirect taxes; overview of the Income-tax Act, 2025; concept of **Tax Year**; person, assessee, income, total income, exempt income,

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taxable income; residential status (introductory); tax regimes; tax slabs; rebate provisions; surcharge and health & education cess (introductory); tax planning, tax avoidance, tax evasion and tax compliance.
Permanent Account Number (PAN); Aadhaar integration; Tax Deduction at Source (TDS); Tax Collection at Source (TCS); Advance Tax; Self-Assessment Tax; tax credits; employer tax compliance; salary taxation (introductory); understanding salary statements; employer-issued tax certificates; income from house property (introductory); capital gains (introductory); income from business or profession (introductory); income from other sources (introductory); deductions available under the Income-tax Act; selection of the appropriate tax regime.
Digital tax administration; taxpayer registration; taxpayer profile management; e-Filing Portal; dashboard; AIS (Annual Information Statement); TIS (Taxpayer Information Summary); tax credit statements; downloading taxpayer information; taxpayer services; digital records; cybersecurity; confidentiality; ethics in tax practice; data privacy; common taxpayer mistakes.

UNIT II: ELECTRONIC FILING OF INCOME TAX RETURNS AND DIGITAL TAX COMPLIANCE:

Selection of appropriate Income Tax Return forms; eligibility for different ITR forms applicable to individuals; pre-filled return data; importing taxpayer information; verification of income; claiming deductions; tax computation; reporting TDS and tax payments; bank account validation; refund claims.
Preparation and electronic filing of Income Tax Returns using the e-Filing Portal; online validation; correction of validation errors; uploading returns; e-verification using Aadhaar OTP, Electronic Verification Code (EVC), Digital Signature Certificate and internet banking.
Belated returns; revised returns; updated returns; correction of errors; rectification requests; responding to basic taxpayer communications; refund processing; refund tracking; grievance redressal; maintaining digital tax records; compliance calendar.
Introduction to GST compliance for small businesses and freelancers; GST registration (overview); GST portal (introductory); digital tax payments; online challans; tax compliance for gig workers, freelancers and first-time entrepreneurs.
Emerging trends in digital taxation; faceless assessments; artificial intelligence in tax administration; pre-filled returns; taxpayer assistance systems; digital governance; ethical responsibilities of tax practitioners.

SUGGESTED READINGS:

1. **Gaur, V.P. & Narang, D.B.**, *Income Tax Law and Practice*, Kalyani Publishers, latest edition.
2. **Singhania, Vinod K. & Singhania, Kapil**, *Direct Taxes: Law and Practice*, Taxmann, latest edition.
3. **Ahuja, Girish & Gupta, Ravi**, *Systematic Approach to Income Tax*, Wolters Kluwer, latest edition.
4. **Income Tax Department, Government of India**, *Income-tax Act, 2025, Income-tax Rules, Circulars, Notifications and Forms*, latest applicable version. Income Tax Department – Official Resources
5. **Income Tax Department, Government of India**, *e-Filing Portal, ITR Forms, User Manuals, FAQs, AIS, TIS and e-Verification Resources*. Income Tax e-Filing Portal
6. **Central Board of Direct Taxes (CBDT)**, *Circulars, Notifications, Taxpayer Services and Guidance Notes*, latest applicable version. CBDT / Income Tax Department
7. **Goods and Services Tax Network (GSTN)**, *GST Portal and Taxpayer Resources*, Government of India. GST Portal
8. **National Portal of India**, *Income Tax and Government Tax Services*. National Government Services Portal

Recommended Websites

- Income Tax Department
- Income Tax e-Filing Portal
- GST Portal
- National Portal of India

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Syllabus note: *Students should refer to the latest applicable statutory provisions, notifications, circulars, return forms and e-filing procedures issued by the Government of India/CBDT. Online resources should be accessed in their current version at the time of study.* The Income Tax Department currently provides dedicated ITR manuals, FAQs, e-Verification resources, AIS resources and tax calculators.

SEC 4(b): E-FILING OF TAX RETURNS AND DIGITAL TAX COMPLIANCE

CO–PO Mapping

Given the distinctly **practical, digital, tax-compliance and employability-oriented** nature of this SEC, the strongest alignment is with **PO2, PO5, PO6, PO7, PO8 and PO10**. In particular, **CO3–CO5** directly establish digital tax-compliance competence.

Mapping Scale: 3 – High | 2 – Moderate | 1 – Low | – No Significant Contribution

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	3	3	3	2	1	3
CO2	3	3	3	2	3	3	3	3	1	3
CO3	3	3	3	3	**3**	3	3	3	2	**3**
CO4	3	3	3	3	**3**	3	3	3	2	**3**
CO5	3	3	3	3	**3**	**3**	**3**	**3**	2	**3**

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