

**BACHELOR OF COMPUTER APPLICATION MASTER OF COMPUTER APPLICATION
INTEGRATED – SEMESTER SEVEN**

Seventh Semester			
S. No.	Name of Subject	Credits	Total Marks
1	Paradigms of Programming	5	100
2	Unix and Shell Programming	5	100
3	Management Information System	4	100
4	Programming in Java	4	100
6	Internet & E-Commerce	4	100
Total		22	

Subject Name: PARADIGMS OF PROGRAMMING

1. Algorithm.
2. Growth of Function.
3. Analyzing Algorithm Control Structure.
4. Recurrences.
5. Quick Sort.
6. Curriculum of Social Studies.
7. Amortized Analysis.
8. Heap.
9. Sorting in Linear Time.
10. Median and Order Statistics.
11. Backtracking.

Subject Name: UNIX AND SHELL PROGRAMMING

1. **Introduction:** Features, System Structure, Shell & its Features, Kernal: Architecture of the UNIX OS, Kernal Data Structure.
2. **Overview:** Logging in & out, I node and File Structure, File System Structure and Features, Booting Sequence & init process, File Access Permissions.
3. **Shell Programming:** Environmental & user defined variables, Argument Processing, Shell's interpretation at prompt, Arithmetic expression evaluation, Control Structure, Redirection, Background process & priorities of process, Conditional Execution, Parameter & quote substitution.
4. **Advanced Shell Programming:** Filtering utilities, Awk, Batch Process, Splitting, comparing, sorting, Merging & Ordering Files, Communications with other users.
5. **Editors and utility:** Link Editor (ed), Screen Editor tutorial (Vi), Fस्क Utility.

Subject Name: MANAGEMENT INFORMATION SYSTEM

1. Introduction to Information System in Business: Organization, Management and Network Enterprises Information system in enterprises, Information system, Organization, Management and Strategy: The changing role of Information system in organization, Decision making, business strategy.
2. Computer Hardware and Computer software, Telecommunications, Categories of computer and Computer system, what is software, System software telecommunication and Networks.
3. Information System for Managerial Decision Support, Managing Knowledge: Knowledge Management in organization, Information and Knowledge work system. Group Discussion Support System (GDSS), What is GDSS, Characteristics of GDSS.
4. Enterprise and Global Management: Redesigning the Organization with Information System: Business Process reengineering and Total Quality Management. Management international Information system: The Growth of international information system, organizing international information system, Managing global system.

Subject Name: PROGRAMMING IN JAVA

1. Internet
2. Object Oriented Programming
3. Introduction to Java
4. Java Fundamentals
5. Java Programming
6. Data Types, Variables and Operators
7. Classes and Objects
8. Exploring Methods and Inheritance
9. Packages and Interface
10. String, Array and Vector
11. Java Language Support and Utility Package
12. File Handling
13. Graphics
14. Networking
15. Remote Method Invocation (RMI)
16. Java Beans
17. HTML and Java Script

Subject Name: INTERNET & E-COMMERCE

1. **Overview of E-Business:** Introduction, Overview of E-Business, Activities using E-Business, E-Business Tools, Advantages of E-Business, The Scope of the Internet and the Web.
2. **Electronic Commerce:** Introduction of E-Commerce, History of E-Commerce, Definition of E-Commerce, Basic Function of Electronic-commerce Systems, The Technologies of E-Commerce, Types of E-Commerce, The Driving Forces of Electronic Commerce, Frame Work of E-Commerce, Issues in Implementing Electronic Commerce, Benefits of E-Commerce, The Limitations of E-Commerce, Benefits of the E-Commerce Market, Increasing Interest in Interfacing Technologies, The Internet, Computer Networks and E-Commerce.
3. **Electronic Payment System:** Introduction, Electronic Payment System, The Need for New Payment Systems Designed for E-Commerce, User Acceptance of Electronic Payment Systems, Characteristics of Electronic Payment System, Classification of Electronic Payment System, Smart

Cards, Credit Card System, SET (Secure Electronic Transactions), PayPal, Micro-payments for Information Goods.

4. **Business to Business E-Commerce:** Introduction to B2B-Business to Business, B2B Evolution, Types of Transactions in B2B, Business-to Business Electronic Commerce Models.
5. **Mobile Commerce:** Introduction, The Unique Characteristics of M-Commerce, Driving Forces of M-Commerce, Limiting Factors of M-Commerce, Mobile Customer and Applications, Challenges and Opportunities in M-Commerce, Security in M-Commerce.
6. **Mobile Banking:** Introduction, Technology and Security Standards in Mobile Banking, Mobile Banking Architecture, Mobile Banking Services, Advantages of Mobile Banking.
7. **Internet:** Introduction of Internet, The History of the Internet, Internet Systems, Internet Applications and Application Protocols, Advantages of Internet, Disadvantages of Internet, Domain Name System, Transmission Control Protocol/Internet Protocol, TCP/IP and the Internet.
8. **Firewall System:** Introduction of Firewall, Types of Firewalls, Proxy Servers, Common Attacks on System.
9. **Electronic Data Interchange:** Introduction, EDI Standards, Advantages of Using EDI Over Paper Systems, EDI Technology

Supply Chain Management: Introduction, Faces of Supply Chain Management, Elements of the Supply Chain Management, Functions of Supply Chain Management, Supply Chain Management Technology, Value Chain Management.